

Before the
 Federal Communications Commission
 Washington, D.C. 20554

In the Matter of)	
)	
Amendment of Parts 13 and 80 of the	)	WT Docket No. 00-48
Commission’s Rules Concerning Maritime)	
Communications)	
)	
Petition for Rule Making Filed by Globe Wireless,	)	RM-9499
Inc.)	
)	
Amendment of the Commission’s Rules	)	PR Docket No. 92-257
Concerning Maritime Communications)	

**SECOND REPORT AND ORDER, SIXTH REPORT AND ORDER, AND
 SECOND FURTHER NOTICE OF PROPOSED RULE MAKING**

Adopted: January 8, 2004

Released: February 12, 2004

Comment Date: [60 days after Federal Register publication]

Reply Comment Date: [90 days after Federal Register publication]

By the Commission:

TABLE OF CONTENTS

Title	Paragraph No.
I. INTRODUCTION AND EXECUTIVE SUMMARY	1
II. BACKGROUND	5
A. GMDSS – WT Docket No. 00-48.....	5
B. VHF Public Coast Stations – PR Docket No. 92-257.....	8
III. GMDSS SECOND REPORT AND ORDER	11
A. Voluntary Restricted GMDSS License	11
B. Coast Station Watches	14
C. Unattended Operation of Non-DSC Equipment	17
D. Distress Frequency Signals.....	21
E. Emission Classes.....	23
F. Use of Channels 75 and 76 for Port Operations.....	24
G. Digital Selective Calling Equipment	26
H. Distress Call and Message Transmission Procedures.....	27
I. INMARSAT-E EPIRBS	29
J. Small Passenger Vessels.....	32
1. DSC Upgrades of VHF and MF Radios	32
2. DSC Upgrades for Single Sideband (SSB) Radios.....	35
3. INMARSAT Ship Earth Stations.....	37
4. Reserve Power Supplies.....	39
5. Updating Position Information	40
K. GMDSS Rules.....	41

1.	Dedicated Radio Operator During Distress Situations	41
2.	Ship Radio Installations	43
3.	Capability for Two-Way Communication on Aeronautical Frequencies	45
L.	Electronic Mail (E-Mail) Requests	47
M.	Tabular Listings of Part 80 Frequencies	48
N.	Examination Requirements for GMDSS Operators	50
O.	Cross-references	52
IV.	VHF PUBLIC COAST STATIONS SIXTH REPORT AND ORDER	53
A.	Distress Communications	53
B.	Frequency Assignments	58
1.	Specification of 12.5 kHz Channels	58
2.	Use of Additional VHF Channels	62
3.	Automatic Identification Systems	64
C.	Technical and Operational Matters	68
1.	Emission Masks and Designators for Data Services	68
2.	Station Identification	71
D.	Miscellaneous Issues	73
1.	Station Documents	73
2.	Filing Documents	77
V.	GMDSS SECOND FURTHER NOTICE OF PROPOSED RULE MAKING	79
A.	Digital Selective Calling Equipment	79
B.	INMARSAT Ship Earth Stations	80
C.	Reserve Power Requirements for Small Passenger Vessels	81
D.	Commercial Operator License Issues	83
E.	Ship Security Alert System	85
F.	Updated References to International Standards	86
G.	2002 Biennial Review	87
VI.	REGULATORY MATTERS	89
A.	Ex Parte Rules – Permit-But-Disclose Proceeding	89
B.	Regulatory Flexibility Act	90
C.	Comment Dates	93
D.	Paperwork Reduction Act	96
E.	Further Information	97
F.	Ordering Clauses	99
	Appendix A – List of Commenters	A-1
	Appendix B – Final Rules	B-1
	Appendix C – Final Regulatory Flexibility Analysis, WT Docket No. 00-48	C-1
	Appendix D – Final Regulatory Flexibility Analysis, PR Docket No. 92-257	D-1
	Appendix E – Initial Regulatory Flexibility Analysis, WT Docket No. 00-48	E-1
	Appendix F – Glossary of Acronyms	F-1

I. INTRODUCTION AND EXECUTIVE SUMMARY

1. In this *Second Report and Order, Sixth Report and Order, and Second Further Notice of Proposed Rule Making*, we address the issues raised in both the *Further Notice of Proposed Rule Making* in WT Docket No. 00-48¹ and the *Fourth Further Notice of Proposed Rule Making* in PR Docket No. 92-

¹ Amendment of Parts 13 and 80 of the Commission’s Rules Concerning Maritime Communications, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 00-48, 17 FCC Rcd 6741 (2002) (*GMDSS R&O*, and *GMDSS FNPRM* or *FNPRM*).

257.² The rule amendments adopted herein represent an important further step in the Commission's ongoing efforts to update and streamline Part 80 of its rules,³ governing the Maritime Radio Services. The paramount goals of this consolidated proceeding⁴ are to enhance maritime safety, promote the efficient use of the maritime radio spectrum, and, to the extent it is consistent with these first two objectives, remove unnecessary regulatory burdens on the users and manufacturers of maritime radio equipment. We also conform Part 80 of the Commission's rules with international standards where doing so will not undermine domestic regulatory objectives.

2. In the *Second Report and Order* in WT Docket No. 00-48, we

- decline to create a voluntary restricted Global Maritime Distress and Safety System (GMDSS) license for recreational boaters;
- clarify the responsibilities of VHF public coast stations that receive calls on the digital selective calling (DSC) distress frequency, Channel 70;
- clarify that VHF public coast stations that are not exempt from the VHF Channel 16 watch requirement must have a radio operator on duty;
- prohibit ship operation of any device capable of transmitting on a distress frequency without regulatory authorization;
- redesignate Channels 75 and 76 for communications related to port operations, and establish requirements for equipment to operate on the channels with reduced carrier power;
- authorize domestic use of INMARSAT-E emergency position indicating radiobeacons (EPIRBs) and establish standards for such devices;
- require that small passenger vessels have digital selective calling capability one year after the U.S. Coast Guard (Coast Guard or USCG) declares Sea Areas A1 and A2 to be operational, and establish additional equipment requirements for such vessels;
- decline to specify that the qualified GMDSS operator required to be on vessels under our rules must be assigned exclusively to radio communications duties during an emergency;
- update the requirements for ship radio installations to incorporate new international regulations;
- incorporate into the rules the international requirement that all passenger ships have the ability to communicate with search and rescue personnel on two specified aeronautical frequencies;
- determine to continue listing the carrier frequency, rather than the assigned frequency, in Part 80 Tables of Frequencies; and

² Amendment of the Commission's Rules Concerning Maritime Communications, *Fourth Further Notice of Proposed Rule Making*, PR Docket No. 92-257, 17 FCC Rcd 227 (2001) (*VPC 4th FNPRM* or *4th FNPRM*).

³ 47 C.F.R. §§ 80.1 *et seq.*

⁴ We hereby consolidate WT Docket No. 00-48 and PR Docket No. 92-257 for the limited purpose of addressing together in this item the issues raised in the *GMDSS FNPRM* and the *VPC 4th FNPRM*. We will address separately petitions for reconsideration of the *GMDSS R&O*.

- specify the number of questions to include in the GMDSS radio operator license examinations.
3. In the *Sixth Report and Order* in PR Docket No. 92-257, we
- clarify the responsibilities of VHF coast stations as to when they must maintain a watch on the Channel 16 distress frequency and as to their obligation to notify the Coast Guard of a station relocation;
 - generally decline to impose additional technical requirements for VHF public coast stations operating on offset channels;
 - deny a request to reallocate nine channel pairs from public safety and other private land mobile radio operations to use by VHF public coast stations;
 - adopt new rules requested by the Coast Guard to govern the implementation of Automatic Identification Systems;
 - establish a new emission mask in Part 80 to accommodate a wide range of data services;
 - eliminate the station identification requirement for VHF public coast stations licensed on a geographic area basis;
 - authorize VHF public coast stations to maintain required station records in electronic form;
 - relax the posting requirement for VHF public coast stations; and
 - clarify that VHF public coast stations, like other providers of commercial mobile radio services (CMRS), have been relieved of certain filing requirements as a matter of forbearance.

4. There remain a few issues for which we seek further comment in a *Second Further Notice of Proposed Rule Making* in WT Docket No. 00-48 (*GMDSS 2nd FNPRM*).⁵ In the *GMDSS 2nd FNPRM*, we first invite comment on whether to revise the requirements for DSC equipment to comport with international standards that were adopted after we last requested comment on this issue. Second, we ask interested parties to consider whether the INMARSAT F-77 ship earth station should be added to the list of ship earth stations that are authorized to be used in lieu of a single sideband radio by vessels traveling more than 100 nautical miles from shore. We also request comment on a recommendation by the National Transportation Safety Board (NTSB) to require all small passenger vessels to have a reserve power source. Next, we ask interested parties to consider possible changes to the rules governing commercial radio operator licenses. Specifically, we ask whether we should make certain commercial radio operator licenses and permits valid for the lifetime of the holder, obviating the need for such licensees to file periodic renewal applications. We also ask for comment on whether we should introduce greater flexibility into the examination process by removing rule provisions that codify the number of questions for each examination element and that require the exclusive use of new question pools immediately upon their public availability. In addition, we solicit comment on technical standards for equipment to be used in the Ship Security Alert System. We also invite recommendations for further updating of Part 80 of the Commission's rules in response to recent changes in international standards, and specifically request comment on whether we should authorize certain on-board frequencies for

⁵ See paras. 79-88, *infra*.

narrowband use domestically. Finally, interested parties are asked to address several proposals to revise or eliminate part 80 rules that were made by Globe Wireless in *ex parte* comments submitted in the 2002 Biennial Review proceeding.

II. BACKGROUND

A. GMDSS – WT Docket No. 00-48

5. In 1974, the International Maritime Organization (IMO)⁶ adopted the International Convention for the Safety of Life at Sea (SOLAS Convention).⁷ The primary objective of the SOLAS Convention is to specify minimum standards for the construction, equipment, and operation of ships, compatible with their safety. In 1988, the IMO amended SOLAS to provide for the worldwide implementation of the GMDSS, a ship-to-shore distress communications system with ship-to-ship capabilities.⁸ GMDSS utilizes automated (or semi-automated) communications via satellite, and advanced terrestrial systems using digital selective calling (DSC). Ships that are subject to the requirements of SOLAS, known as “compulsory ships,”⁹ must carry certain GMDSS radio equipment for safety purposes. In contrast, SOLAS does not require “voluntary ships” to carry GMDSS equipment.¹⁰ The SOLAS amendments provided for the gradual worldwide implementation of GMDSS from February 1, 1992 until February 1, 1999.

6. On January 16, 1992, the Commission adopted rules to implement GMDSS in the United States, requiring the installation of GMDSS equipment by February 1, 1999.¹¹ Additionally, the Commission incorporated into its rules international equipment standards promulgated by the IMO, the International Telecommunication Union (ITU), the International Electro-technical Commission (IEC), and the International Standards Organization (ISO). Since 1992, however, many of these international standards have been revised to clarify, improve, and update the GMDSS requirements. In light of these revisions, on March 17, 2000, the Commission issued a *Notice of Proposed Rule Making* in WT Docket No. 00-48, in which it proposed to revise Part 80 of its rules to reflect changes in international standards and regulations; delete or modify rules affected by full implementation of GMDSS; and delete or modify any other regulations deemed unnecessary or in need of clarification.¹² The Commission also invited commenters to propose other changes to Part 80.¹³

⁶ The IMO is an agency of the United Nations that specifies regulations for the maritime service, such as equipment carriage requirements for certain classes of ships.

⁷ Earlier versions of the SOLAS Convention were adopted in 1914, 1929, 1948, and 1960.

⁸ Consolidated Text of the International Convention for the Safety of Life at Sea, 1974, and its Protocol of 1977: Articles, Annexes and Certificates, Incorporating All Amendments in Effect from 1 July 1997, International Maritime Organization, London, 1997.

⁹ Compulsory ships include all passenger ships that carry more than twelve passengers and all cargo ships of 300 gross tons and over conducting international voyages.

¹⁰ See 47 C.F.R. § 80.5, *Categories of ships* (defining a voluntary ship as “[a]ny ship which is not required by treaty or statute to be equipped with radiotelecommunication equipment”).

¹¹ Amendment of Parts 13 and 80 of the Commission’s Rules to Implement the Global Maritime Distress and Safety System (GMDSS) to Improve the Safety of Life at Sea, *Report and Order*, PR Docket No. 90-480, 7 FCC Rcd 951 (1992).

¹² Amendment of Parts 13 and 80 of the Commission’s Rules Concerning Maritime Communications, *Notice of Proposed Rule Making and Memorandum Opinion and Order*, WT Docket No. 00-48, 15 FCC Rcd 5942 (2000) (*GMDSS NPRM*).

¹³ *Id.* at 5944, ¶ 2, 5951 ¶ 17.

7. In the *GMDSS R&O*, the Commission addressed the issues raised in the *GMDSS NPRM*, adopting or revising a number of rules to govern the further implementation of GMDSS requirements domestically.¹⁴ At the same time, in the *GMDSS FNPRM*, the Commission solicited comment on additional issues. Specifically, the Commission asked whether it should establish a voluntary restricted GMDSS license or take other measures to address the needs of recreational vessel operators; clarify or change the safety watch obligations of public coast stations; permit unattended operation of non-DSC equipment; prohibit ship stations from including any device capable of transmitting on a distress frequency without regulatory authorization; delete any existing emission classes; permit the use of Channels 75 and 76 for navigation-related port operations, subject to specified power limits, and also limit transmitters operating on such channels to the specified power limits, with no manual override capability; codify in the rules the Radio Technical Commission for Maritime Services (RTCM) Recommended Practices for DSC equipment; revise the Part 80 radiotelephone and radiotelegraph distress call and message transmission procedures to incorporate DSC and GMDSS procedures; authorize the use of INMARSAT-E EPIRBs by U.S. vessels operating solely within the INMARSAT coverage footprint; require that small passenger vessels be outfitted with DSC equipment; mandate, on passenger ships, the assignment of at least one qualified person to perform only radio communications duties during distress situations; and incorporate additional SOLAS requirements for equipment in Subpart W.¹⁵ The Commission also requested comment on issues pertaining to e-mail requests, Part 80 tables of frequencies, GMDSS radio operator examination requirements, and Part 80 cross-references to Part 2 of the Commission's rules.¹⁶ We resolve these issues in the *Second Report and Order* in WT Docket 00-48 herein.

B. VHF Public Coast Stations – PR Docket No. 92-257

8. Very high frequency (VHF) public coast (VPC) stations are CMRS providers that serve port or coastal areas, permitting ships at sea to send and receive messages and to interconnect with the public switched telephone network (PSTN).¹⁷ In addition to providing public correspondence service, however, VPC stations are part of an international safety system intended to provide assistance to vessels in distress.¹⁸ Vessel operators use marine VHF Channel 16 (156.8 MHz) in the same manner that landline telephone subscribers dial “911” in an emergency.¹⁹ VPC stations, as well as other nearby vessels, respond to vessel operators' distress messages and relay the messages to local search and rescue authorities.²⁰ The Coast Guard is responsible for such search and rescue operations at sea and on inland waterways in the United States.²¹

9. In July 1998, the Commission released a *Third Report and Order and Memorandum Opinion and Order* in PR Docket No. 92-257, in which it, *inter alia*, adopted a geographic area licensing approach

¹⁴ See *GMDSS R&O*, 17 FCC Rcd at 6744, ¶ 2, for an overview of the actions taken therein.

¹⁵ *GMDSS FNPRM*, 17 FCC Rcd at 6781, ¶ 108.

¹⁶ *Id.*

¹⁷ See Implementation of Sections 3(n) and 332 of the Communications Act – Regulatory Treatment of Mobile Services, *Second Report and Order*, GN Docket No. 93-252, 9 FCC Rcd 1411, 1448, ¶ 83 (1994), *recon. dismissed in part and denied in part*, 15 FCC Rcd 5231 (2000); see also 47 C.F.R. § 20.9(a)(5).

¹⁸ *VPC 4th FNPRM*, 17 FCC Rcd at 230, ¶ 5.

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

for VPC stations,²² clarified the safety watch requirements of VPC licensees,²³ and authorized VPC licensees to operate on 12.5 kHz offset frequencies where they are authorized to operate on both 25 kHz frequencies adjacent to the offset frequency.²⁴ In December 2001, in response to recommendations from both the USCG and Maritel, Inc. (Maritel)²⁵ received in response to the *GMDSS FNPRM*, the Commission released the *VPC 4th FNPRM*.

10. In the *VPC 4th FNPRM*, the Commission sought comment on its tentative conclusions not to include the 12.5 kHz offset channels in the Part 80 table of frequencies, and not to propose occupied bandwidth, emission mask, and related regulations that would govern the operation of VPC stations that employ 12.5 kHz narrowband channels; and to reject Maritel's recommendation to require that geographic area VPC licensees retain a watch only after expiration of the licensee's construction period or construction of the licensee's facilities, and the licensee receives written notification from the USCG to maintain a watch.²⁶ The Commission also sought comment on whether Part 90 public safety entities would be adversely affected by the reallocation of nine VHF channels pairs to VPC licensing, as proposed by Maritel; and whether to eliminate the station identification requirement for geographic area VPC licensees. Finally, the Commission sought comment on its proposals to allow the USCG and VPC licensees flexibility to choose non-offset, as well as offset, channel pairs when negotiating an agreement regarding designation of two narrowband channel pairs to be used by the USCG for its Ports and Waterways Safety System (PAWSS);²⁷ to expand the types of emission masks and designators permissible under Part 80 of its rules in order to allow VPC licensees to provide a full range of data services; and to allow public coast stations to maintain station documents via electronic means, and to limit the posting requirement for VPC geographic area licensees to a document identifying the licensee and a representative that may be contacted to answer any questions regarding the operation of a particular station transmitter.²⁸ We resolve these issues in the *Sixth Report and Order* in PR Docket 92-257 herein.

III. GMDSS SECOND REPORT AND ORDER

A. Voluntary Restricted GMDSS License

11. *Background.* In the *FNPRM*, the Commission observed that both the National GMDSS

²² Amendment of the Commission's Rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, PR Docket No. 92-257, 13 FCC Rcd 19853, 19859-60 ¶¶ 10-11 (1998) (*VPC Third R&O*). The Commission also determined that it would use competitive bidding procedures to resolve mutually exclusive applications for VPC geographic area licenses. *Id.* at 19882-83, ¶ 61.

²³ *Id.* at 19880-81, ¶¶ 57-58. Specifically, the Commission determined that, subject to certain provisos, it would exempt VPC stations from the Channel 16 watch requirement where federal, state, or local governments maintain a continuous watch over ninety-five percent of the station's service area. *Id.* This exemption is codified at 47 C.F.R. § 80.303(b).

²⁴ *Id.* at 19875, ¶ 46.

²⁵ Maritel is the largest provider of VPC services in the United States, with stations throughout most of the coastal United States and U.S. inland waterways interconnected to Maritel's control switching office in Biloxi, Mississippi. Maritel Comments (WT 00-48) at 1. It is the licensee of, *inter alia*, VHF Public Coast Service Areas 1-9 as well as inland VPC licenses. *Id.*; see also FCC Announces the Conditional Grant of 26 VHF Public Coast Service Licenses, *Public Notice*, DA 99-195, at 1 (rel. May 21, 1999); VHF Public Coast and Location and Monitoring Service Spectrum Auction Closes: Winning Bidders Announced, *Public Notice*, 16 FCC Rcd 12509 (2001).

²⁶ *VPC 4th FNPRM*, 17 FCC Rcd at 228, ¶ 1.

²⁷ PAWSS will provide Vessel Traffic Services to facilitate the safe and efficient transit of vessel traffic. See *VPC Third R&O*, 13 FCC Rcd at 19875, ¶ 46.

²⁸ *VPC 4th FNPRM*, 17 FCC Rcd at 228, ¶ 1.

Implementation Task Force (Task Force)²⁹ and Recreational Boating Association of Washington (RBAW) were recommending that the Commission establish a voluntary restricted GMDSS radio operator's license to satisfy a need for voluntary training by recreational vessel operators who will soon begin using VHF-DSC, but who are not now required to hold any license or receive any training.³⁰ The commenters were concerned that, absent a licensing framework, these anticipated new users of DSC equipment would pose a serious false alarm threat to the safety system.³¹ However, the Commission tentatively determined that it should not create a new license for recreational vessel operators who voluntarily complete training in VHF-DSC because of the enormous burden on Commission resources that such a licensing framework would entail and because of the lack of any precedent for such a "voluntary" license.³² The Commission nonetheless invited further comment on this issue, based in part on a recognition that there may be some need for recreational vessel operators chartering recreational vessels in other countries to demonstrate competency in the use of DSC equipment.³³

12. *Discussion.* We share the concerns of commenters regarding the potential problem of widespread false alerts that could stem from the growing use of DSC equipment by recreational boaters,³⁴ and we attach great weight in particular to the USCG's espousal of a licensing scheme to address this potential problem³⁵ because the USCG has primary responsibility for maritime search and rescue operations. However, we continue to believe that it would be premature at this time to adopt any new licensing framework or other regulatory requirement to address this matter. As RBAW notes, we cannot predict the scope of the false alert concern.³⁶ Further, as the Commission indicated in the *FNPRM*,³⁷ a licensing framework of this sort would represent a significant departure from our licensing precedent inasmuch as we do not require recreational vessel operators to carry DSC equipment, but they would be subject to licensing if they voluntarily chose to do so.³⁸ We note, moreover, that while the USCG believes a licensing framework is essential to address the expected increase in false alerts, the other commenters, including the Task Force and RBAW, now appear to believe other measures may suffice just as well.³⁹ We are therefore reluctant to adopt a licensing framework that would be administratively

²⁹ See Appendix A, *infra*, for a list of the commenters and the abbreviations by which they are referred. The deadline for comments in WT Docket No. 00-48 was August 15, 2002. See 67 FR 35086 (May 17, 2002). The Comments of the Task Force and Dr. Schenk of America LLC were filed late, on September 3, 2002, and August 22, 2002, respectively, and the Task Force filed a Motion to Accept Late Filing. We accept the late-filed comments of the Task Force and Dr. Schenk of America LLC in the interest of developing as complete a record as possible in this proceeding.

³⁰ *GMDSS FNPRM*, 17 FCC Rcd at 6781, ¶ 109.

³¹ *Id.*

³² *Id.* at 6781, ¶ 110.

³³ *Id.*

³⁴ See, e.g., USCG Comments (WT 00-48) at 3; Kurt Anderson Comments at 8; Owen Anderson Comments at 6; Neuman Comments at 2.

³⁵ USCG Comments (WT 00-48) at 3 ("The only known mechanism [to address this concern] is a licensing scheme that would have as a component completion of an appropriate short training course.").

³⁶ RBAW Comments at 1.

³⁷ *GMDSS FNPRM*, 17 FCC Rcd at 6781, ¶ 110.

³⁸ The risks of providing for such "voluntary licensing" include creating a new paperwork burden for the recreational boating community, the possibility of creating a disincentive for recreational boaters to upgrade to DSC, and engendering confusion with the Restricted GMDSS Radio Operator's License that is mandatory on compulsory ships.

³⁹ See Task Force Comments at 5; RBAW Comments at 1; RBAW Reply Comments at 1. See also Owen Anderson Comments at 6.

burdensome for the Commission, and that could also be viewed as burdensome by the recreational boating community, to address what is still largely a theoretical problem, especially since it is uncertain that a licensing framework would prove significantly better than alternative means of encouraging recreational boaters to be trained in DSC operation. Further, while the Commission, in the *GMDSS FNPRM*, specifically contemplated the need for a voluntary restricted GMDSS radio operator's license by persons chartering recreational vessels in other countries,⁴⁰ no commenter suggested that we establish a license on the basis of the particular needs of such persons. We thus agree with the majority of commenters that we should not establish a voluntary restricted GMDSS radio operator's license for recreational boaters that install DSC equipment.

13. Most commenters also stated that training of recreational boaters in the use of DSC equipment should, at a minimum, be encouraged, and that the Commission should consider making such training and/or the completion of a test mandatory, with compliance therewith evidenced by a certificate of completion.⁴¹ The Task Force notes that the United Kingdom and several other countries use a mandatory training requirement of this sort.⁴² In the United States, providing such training and testing would most logically fall to the U.S. Coast Guard Auxiliary, U.S. Power Squadrons (USPS),⁴³ state regulators and/or private sector entities.⁴⁴ We decline to impose a mandatory training/certification requirement at this time for a number of reasons. First, as noted earlier, it is difficult to predict the scope of the false alert concern. Second, although the USCG indicates that there are some VHF-DSC training courses in place, the record is devoid of any information on the availability of such training courses. We are unwilling to mandate training without certainty that it will be reasonably available to all recreational boaters that wish to use VHF-DSC. Third, there remain a number of unanswered questions regarding implementation and enforcement of a training requirement. For example, what amount and type of training is sufficient?⁴⁵ Is it necessary for the person seeking certification simply to take a course, or should the person also be required to pass an examination? Should such a requirement apply to recreational boaters who already own and use VHF-DSC radios? Will the USCG be responsible for enforcement of the certification requirement? If so, what sanctions can the USCG impose for the violation of what is an FCC requirement? On this record, then, we believe imposition of a mandatory certification requirement for recreational boaters using VHF-DSC is premature. We emphasize, however, that we recognize the potential seriousness of the false alert concern identified by the commenters, and that we intend to monitor the situation carefully so that we may take appropriate action, if necessary,

⁴⁰ *GMDSS FNPRM*, 17 FCC Red at 6781, ¶ 110.

⁴¹ See, e.g., USCG Comments (WT 00-48) at 3; Task Force Comments at 5; RBAW Comments at 1; RBAW Reply Comments at 1; Owen Anderson Comments at 6.

⁴² The Task Force observes that, in the United Kingdom, the course in DSC use is offered by the Royal Yachting Association, which also issues a Certificate of Completion. Task Force Comments at 5.

⁴³ USPS is a non-profit, educational organization dedicated to making boating safer and more enjoyable by teaching classes in seamanship, navigation and related subjects. See <http://www.usps.org/newpublic1/guesthome.htm>.

⁴⁴ See USCG Comments (WT 00-48) at 3 (noting that the Coast Guard Auxiliary and USPS currently offer such courses); Task Force Comments at 5 (noting that the Task Force has encouraged the Coast Guard Auxiliary and the USPS to offer a voluntary one-day course in VHF-DSC and has encouraged development of an interactive online course); RBAW Comments at 1 (recommending that the only action the Commission should take now is to delegate authority to the Wireless Telecommunications Bureau, Public Safety and Private Wireless Division, to enter into memoranda of agreement with the Coast Guard Auxiliary, USPS, and other organizations to issue Certificates of Completion of examinations covering VHF and VHF-DSC procedures); Owen Anderson Comments at 6 (suggesting that certification could be given by any person or organization approved by the USCG and/or the Commission); RBAW Reply Comments at 1 (VHF-DSC training of recreational boaters should be "administered by representatives of those that will be affected by the process and results").

⁴⁵ RBAW states that the choice of classroom training or self-study should be left to the discretion of the person seeking certification. RBAW Reply Comments at 1.

before any such problem gets out of hand. For now, we will endeavor to coordinate with and assist the USCG in educating the recreational boating community about this issue, encouraging voluntary training in VHF-DSC, and developing appropriate standards for training and certification. We reserve discretion to revisit the possibility of imposing a mandatory certification requirement for recreational boaters using VHF-DSC, upon request of the USCG or another interested party, if future circumstances suggest a need for such requirement.⁴⁶ We emphasize, moreover, that it is not the Commission's intent to preempt any state requirements for training or certification of recreational boaters in VHF-DSC.

B. Coast Station Watches

14. *Background.* Section 80.103(c) of the Commission's rules specifies that acknowledgment of DSC distress and safety calls must be made by "designated coast stations" in accordance with procedures contained in ITU-R Recommendation 541.⁴⁷ In its comments to the *GMDSS NPRM*, Maritel stated that this rule presumes the establishment of Sea Area A1,⁴⁸ and observed that no coast station will have this ability until the establishment of that Sea Area.⁴⁹ Maritel further asserted that the definition of the term "designated coast station," as used in section 80.103(c), is unclear, and asked that the Commission clarify that the term is intended to refer to the USCG or its designee following the establishment of Sea Area A1.⁵⁰ In response to Maritel's comments, the USCG stated that it supports a mandate that any coast station operating on Channel 70, the DSC distress channel, have the ability and obligation to answer a distress call on that channel if a USCG station does not or cannot answer such a call within the required time.⁵¹ The USCG further stated that the obligation of a VPC station answering such a call would be similar to existing VPC obligations regarding the receipt of a distress and safety call over voice channels.⁵² In the *GMDSS FNPRM*, the Commission asked the parties to further explain their positions on this issue, and sought comment on the Commission's authority to require public coast stations to conduct continuous safety watches, the economic impact of such a requirement on public coast stations, and the manner in which coast stations could relay distress communications to the USCG.⁵³

15. *Discussion.* We clarify that the term "designated coast stations" in section 80.103(c) is not intended to encompass all VPC stations. Accordingly, VPC stations are not under an obligation to maintain a Channel 70 watch or to routinely acknowledge Channel 70 distress calls. To read section 80.103(c) otherwise would be patently inconsistent with section 80.1119 of the Commission's rules, which states, *inter alia*, that coast stations that receive a GMDSS distress alert should wait three minutes for an acknowledgement to be made by a Rescue Coordination Center and, if no such acknowledgement occurs within the three-minute period, must ensure that the distress alert is routed to a Rescue

⁴⁶ Neuman suggests that one means of addressing the expected increase in false alerts stemming from use of VHF-DSC by recreational boaters would be to establish a voice channel for use between recreational boaters and commercial ships. Neuman Comments at 2. This proposal is beyond the scope of the *FNPRM*.

⁴⁷ 47 C.F.R. § 80.103(c).

⁴⁸ Sea Area A1 is an area within radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available as defined by the IMO. Sea Area A2 is an area, excluding Sea Area A1, within radiotelephone coverage of at least one medium frequency (MF) coast station in which continuous DSC alerting is available as defined by the IMO. Sea Area A3 is an area, excluding Sea Areas A1 and A2, within the coverage of an INMARSAT geostationary satellite in which continuous alerting is available. Sea Area A4 is an area outside Sea Areas A1, A2, and A3. See 47 C.F.R. § 80.1069(a).

⁴⁹ See *GMDSS FNPRM*, 17 FCC Rcd at 6782, ¶ 111.

⁵⁰ *Id.*

⁵¹ *Id.* at 6782, ¶ 112.

⁵² *Id.*

⁵³ *Id.* at 6782, ¶ 113.

Coordination Center as soon as possible, and must provide assistance for distress communications when requested to do so by the USCG.⁵⁴ In addition, the Commission has specifically rejected the idea of proposing GMDSS watch requirements for VPC stations.⁵⁵ We read the USCG's comments in response to the *GMDSS FNPRM* to be in accord with this position.⁵⁶ We agree with the USCG that a mandatory Channel 70 watch requirement for VPC stations is not warranted. We believe that a Channel 70 watch requirement should not be deemed simply an extension to newer technology of VPC licensees' existing requirement to maintain a watch on VHF Channel 16.⁵⁷

16. While we view the responsibility to monitor Channel 70, and to acknowledge and respond to Channel 70 distress calls, as ultimately that of the USCG, we understand that the USCG does not yet have the facilities in place to fully implement such monitoring.⁵⁸ We also observe that VPC stations currently receive DSC messages, even in the absence of a watch requirement. We remind VPC licensees of the need to fully comply with the procedures set forth in section 80.1119 when they receive a DSC distress call. As Maritel acknowledges, "public coast stations have a unique role in the marine communications network ... [and an] obligation to provide assistance to the Coast Guard when that assistance is required in certain circumstances."⁵⁹ With the benefit of this clarification, we encourage Maritel and other VPC licensees to engage in a dialogue with the USCG to determine how they can most expeditiously and effectively transfer DSC distress calls to the USCG,⁶⁰ and otherwise provide appropriate assistance to the USCG when requested to do so.

C. Unattended Operation of Non-DSC Equipment

17. *Background.* Section 80.179 of the Commission's rules permits unattended operation of DSC transmitters at VPC stations.⁶¹ Maritel, which operates both DSC and non-DSC equipment, requested that we extend section 80.179 to non-DSC equipment by allowing the unattended operation of such

⁵⁴ See 47 C.F.R. § 80.1119(a). The rule adds parenthetically that, "This subpart [referring to Part 80, Subpart W, which contains the Commission's GMDSS rules] does not specify any radio watches for coast stations." *Id.*

⁵⁵ See Amendment of Parts 13 and 80 of the Commission's Rules to Implement the Global Maritime and Distress Safety System (GMDSS) to Improve the Safety of Life at Sea, *Notice of Proposed Rule Making*, PR Docket No. 90-480, 5 FCC Rcd 6212, 6216, ¶ 34 (1990) ("Also, we propose no additional GMDSS watches be required for public coast stations. As the GMDSS is defined, only certain coast stations (and coast earth stations) are designated to maintain the DSC frequency watches.").

⁵⁶ USCG Comments (WT 00-48) at 3 ("USCG does not seek to impose any additional watch requirement on coast stations but rather to require coast stations during their hours of operation to provide such assistance as the Coast Guard may require to properly receive, acknowledge, and process a DSC distress alert.").

⁵⁷ A Channel 70 watch requirement for VPCs cannot be deemed merely an extension of the Channel 16 watch requirement. First, different equipment is required. Second, a second, cumulative watch requirement adds to the licensee's compliance burden irrespective of the equipment needed to maintain the watch. Third, coast stations are exempt from the Channel 16 watch requirement in areas where federal, state, or local governments maintain a continuous watch over ninety-five percent of the station's service area. See note 23, *supra*. Finally, treating a Channel 70 watch requirement for VPCs as an extension of the Channel 16 watch requirement is inconsistent with the Commission's clearly expressed determination not to impose GMDSS watch requirements on VPCs. See note 55, *supra*.

⁵⁸ See, e.g., <http://www.uscg.mil/hq/g-a/ndrsmp/Implementation.htm>.

⁵⁹ Maritel Comments (WT 00-48) at 7.

⁶⁰ Maritel indicates that its current practice is to transfer DSC distress calls to the USCG by facsimile transmission. See Maritel Comments (WT 00-48) at 5. The record does not indicate that this practice is unsatisfactory to the USCG, and we have no occasion here to assess whether it is sufficient under section 80.1119 of the Commission's rules.

⁶¹ 47 C.F.R. § 80.179.

equipment so long as the licensee has the ability to remotely terminate operations of the transmitter.⁶² The Commission stated in the *FNPRM* that it was not persuaded by Maritel's proposal, and expressed concern that allowing unattended operation of non-DSC equipment might encourage potential abuse and overloading of VHF distress channel 16.⁶³ The Commission also expressed concern about "the implications of acknowledging distress calls without any manual intervention."⁶⁴ The Commission sought comment on its tentative determination to reject Maritel's proposal to permit unattended operation of non-DSC equipment.⁶⁵

18. *Discussion.* On further review, we conclude that our rules already permit VPC stations to engage in unattended operation of non-DSC equipment, provided that they are exempt from the Channel 16 watch requirement pursuant to section 80.303 of the Commission's rules.⁶⁶ To that extent, we agree with Maritel's proposal to permit unattended operation. However, VPC stations that are still subject to a Channel 16 watch requirement must have a licensed radio operator on duty, pursuant to section 80.153.⁶⁷

19. We disagree with Maritel insofar as it contends that the Commission has already eliminated the requirement that even public coast stations subject to a Channel 16 watch have an operator on duty, and has instead afforded public coast station licensees discretion to determine whether or not to have an operator on duty, in accord with international regulations.⁶⁸ Maritel cites the Commission's 1997 *Second Report and Order* in PR Docket No. 92-257 for the proposition that the Commission has already eliminated the operator requirement for coast stations.⁶⁹ However, the cited decision was limited to allowing VPC stations to automatically interconnect marine radios with the public switched telephone network, and was intended to allow VPC licensees to decide for themselves whether to provide operator assistance for such calls.⁷⁰ Similarly, the *VPC Third R&O*, also cited by Maritel,⁷¹ did not authorize VPC stations to engage in unattended operation beyond automated interconnection of public correspondence traffic to the PSTN. The Commission there responded to one commenter's argument to eliminate the Channel 16 watch requirement for VPC stations in order to put them on an equal footing with other CMRS providers by pointing out that the commenter "fail[ed] to take account that *other services are intended to be fully automated*, and that they emerged in a different context from the Maritime Services,

⁶² See *GMDSS FNPRM*, 17 FCC Rcd at 6782, ¶ 114.

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ 47 C.F.R. § 80.303.

⁶⁷ *Id.* § 80.153.

⁶⁸ Maritel Reply Comments (WT 00-48) at 6-8. It is unclear from its comments whether Maritel is indeed arguing that VPC stations subject to a Channel 16 watch requirement have been given discretion to dispense with a live operator to the same extent as stations exempt from the Channel 16 watch. Although Maritel generally does not qualify its assertion that VPC stations have been given discretion as to whether or not to have an operator on duty, it elsewhere states that, "[p]lainly, a coast station that is not required to maintain a channel 16 watch should not be required to have an operator on duty." *Id.* at 7-8.

⁶⁹ *Id.* at 7, citing Amendment of the Commission's rules Concerning Maritime Communications, *Second Report and Order and Second Further Notice of Proposed Rule Making*, PR Docket No. 92-257, 12 FCC Rcd 16949, 16959 ¶ 14 (1997) (*VPC Second R&O*).

⁷⁰ *VPC Second R&O*, 12 FCC Rcd at 16959, ¶ 14 ("Allowing public coast stations the option to provide automatic interconnection between marine radios and the PSN [public switched network] will enhance their ability to compete effectively in coastal regions with other CMRS providers").

⁷¹ Maritel Reply Comments (WT 00-48) at 7 (citing *VPC Third R&O*, 13 FCC Rcd 19881, ¶ 58).

*with their public safety component.*⁷² Read in context, then, the holdings cited by Maritel did not intend to give VPC licensees discretion to dispense with a live operator for the receipt of distress calls to be forwarded to search and rescue authorities, but only with respect to public correspondence. We believe a contrary reading, moreover, would be inconsistent with the plain language of section 80.153 of the Commission's rules, which states that, "[e]xcept as provided in § 80.179, operation of a coast station transmitter must be performed by a person holding a commercial radio operator license of the required class, who is on duty at the control point of the station."⁷³

20. In sum, we believe that the Commission's current rules retain an operator requirement for VPC stations subject to a Channel 16 watch, that the requirement is rooted in maritime safety concerns, and that Maritel has not demonstrated that it would serve the public interest to remove this requirement. We agree with the USCG that retaining the operator requirement for VPC stations that remain subject to a Channel 16 watch will promote maritime safety by better ensuring that VHF distress calls received by such stations are properly relayed to search and rescue authorities.⁷⁴ On the other hand, we agree with Maritel insofar as it contends that unattended operation of non-DSC equipment is permissible for VPC stations that are exempt from the Channel 16 watch.

D. Distress Frequency Signals

21. *Background.* In the *FNPRM*, the Commission invited comment on a USCG proposal to amend section 80.203 of the Commission's rules⁷⁵ to prohibit the inclusion in ship stations of any device capable of transmitting on a distress frequency any signal that is not specifically authorized in the rules.⁷⁶ The Commission noted, however, that the Communications Act is very permissive about distress signals, and that the effect of this proposal on the ability of manufacturers to add tone signaling equipment was unclear.⁷⁷ The Commission also stated that this proposal appeared to impede manufacturers from improving their equipment.⁷⁸

22. *Discussion.* Based on the record evidence, we adopt the USCG's proposal, and amend section 80.203 to bar ship stations from including any device capable of transmitting on a distress frequency without regulatory authorization. We concur with the USCG and RBAW that this amendment will promote safety by better ensuring that the USCG can process any distress or safety signal it receives.⁷⁹ As the USCG observes, "[a]bsent regulation of the signal characteristics being transmitted, the high potential exists that an emission thought helpful by an individual manufacturer could unintentionally result in adverse effects to other vessels or the shore-based system."⁸⁰ The Commission's concerns about the proposed amendment were premised on the effect it might have on manufacturers' flexibility. However, no manufacturer has interposed any objection to the proposal, and there is nothing in the record to indicate that it will adversely affect manufacturers. In addition, we conclude that a prohibition on

⁷² *VPC Third R&O*, 13 FCC Rcd at 19881 ¶ 57 (emphases added); *see also id.* at 19881, ¶ 58.

⁷³ 47 C.F.R. § 80.153(a).

⁷⁴ USCG Comments (WT 00-48) at 4.

⁷⁵ 47 C.F.R. § 80.203.

⁷⁶ *GMDSS FNPRM*, 17 FCC Rcd at 6783, ¶ 115.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ USCG Comments (WT 00-48) at 4; RBAW Comments at 1. *See also* Neuman Comments at 2.

⁸⁰ USCG Comments (WT 00-48) at 4.

devices capable of transmitting unauthorized signals is consistent with the Communications Act.⁸¹

E. Emission Classes

23. The Commission invited further comment in the *FNPRM* on whether to delete any of the emission classes authorized under section 80.205 or section 80.207.⁸² The Commission asked any proponents of the deletion of an emission class to explain the public interest benefits of such a deletion, and said it was especially interested in receiving data or anecdotal evidence indicating whether the availability of these emission classes has caused actual interference to marine radio communications.⁸³ The Commission received no comments addressing this issue, and we will accordingly retain all of the existing classes of emissions authorized under sections 80.205 and 80.207 of the Commission's rules.

F. Use of Channels 75 and 76 for Port Operations

24. *Background.* Section 80.373 of the Commission's rules describes the carrier frequencies assignable for ship-to-ship and ship-to-coast private communications.⁸⁴ Based on a USCG recommendation, the Commission proposed in the *FNPRM* to amend section 80.373 by redesignating Channels 75 (156.775 MHz) and 76 (156.825 MHz), which are currently designated as guard bands for Channel 16 (156.800 MHz) and thus unavailable for use, for port operations.⁸⁵ The Commission further proposed to limit transmitter output power on Channels 75 and 76 to one watt for ship stations and ten watts for coast stations, and to require all precautions necessary to avoid harmful interference to Channel 16.⁸⁶ In addition, the Commission invited comment on amending section 80.215(g)(3) of its rules⁸⁷ to require the design of transmitters that will reduce the carrier power to one watt or less when the transmitter is tuned to Channel 75 or 76, with no manual override capability.⁸⁸ The Commission also sought comment on whether to require all new radios to have the ability to tune to Channels 75 and 76.⁸⁹ The Commission did not propose to adopt these equipment requirements, but only sought comment on whether they should be adopted, because it was concerned about the impact on manufacturers of such requirements.⁹⁰ The Commission also asked for suggestions on appropriate grandfathering clauses, should it implement these proposed new equipment requirements, and asked whether it should convert Channels 75 and 76 to narrowband channels.⁹¹ Finally, and again based on the USCG's recommendation, the Commission proposed to amend the table heading for Channel 22A to read "Liaison and Safety Broadcasts, U.S. Coast Guard" to reflect how the frequency is being used.⁹²

25. *Discussion.* We concur with the USCG and RBAW, the only commenters addressing this

⁸¹ See 47 U.S.C. §§ 302, 361.

⁸² *GMDSS FNPRM*, 17 FCC Rcd at 6783, ¶ 116.

⁸³ *Id.*

⁸⁴ 47 C.F.R. § 80.373.

⁸⁵ *GMDSS FNPRM*, 17 FCC Rcd at 6783, ¶ 117. As part of this proposal, the Commission would add Channels 75 and 76 to the table in Section 80.373(f) of its rules, 47 C.F.R. § 80.373(f).

⁸⁶ *GMDSS FNPRM*, 17 FCC Rcd at 6783, ¶ 117.

⁸⁷ 47 C.F.R. § 80.215(g)(3).

⁸⁸ *GMDSS FNPRM*, 17 FCC Rcd at 6784, ¶ 118.

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

issue, that we should designate Channels 75 and 76 for port operations and designate Channel 22A as “Liaison and Safety Broadcasts, U.S. Coast Guard.”⁹³ There is a need for additional spectrum for port operations-related communications, and redesignating Channels 75 and 76 for that purpose will address that need. We also agree with the USCG that we should mandate that new ship radio equipment be required to have Channels 75 and 76, and be required to reduce the carrier power to one watt or less, with no manual override capability, when the transmitter is tuned to either of those channels.⁹⁴ These measures will ensure the effective use of Channels 75 and 76 for port communications without causing harmful interference to Channel 16. The Commission declined to propose these equipment requirements in the *FNPRM* out of a concern about the impact they might have on manufacturers.⁹⁵ The Commission specifically solicited comment from manufacturers as to how such requirements might affect them.⁹⁶ We did not receive responsive comments from any manufacturer, and there is nothing in the record to suggest that these requirements will be onerous or problematic. In addition, no commenter suggested a specific period of grandfathering protection.⁹⁷ We believe it would impose unnecessary costs on ship station licensees and possible burdens on manufacturers to require that they immediately replace all existing radio equipment that does not comply with the new requirements, so we will grandfather existing equipment indefinitely from these requirements. Non-compliant equipment installed prior to the effective date of these rules may continue to be used for its remaining useful life. In addition, we will allow installation of non-compliant equipment until one year after the effective date of these rules. Beginning one year after the effective date of these rules, we will require new equipment installations to comply with the new requirements pertaining to Channels 75 and 76. Given that no manufacturers commented on these equipment issues, we have no reason to believe that this approach will leave manufacturers with stranded inventory. Finally, we decline to narrowband channels 75 and 76 because, as noted by the USCG, this conversion could potentially affect the interoperability of existing equipment with new equipment.⁹⁸

G. Digital Selective Calling Equipment

26. The Commission proposed in the *FNPRM*, based on a USCG recommendation supported by RBAW, to amend section 80.225 of its rules,⁹⁹ which sets forth the requirements for selective calling equipment, to incorporate the RTCM Special Committee 101’s Recommended Practices for Digital Selective Calling Equipment Design and Implementation.¹⁰⁰ Commenters were asked, *inter alia*, to consider whether further amendments to section 80.225 are warranted in light of continued revisions to DSC requirements under consideration by both the ITU and the IEC.¹⁰¹ The unanimous view of the commenters was that we should defer amending section 80.225 until the adoption of ITU Recommendation ITU-R M.493-11.¹⁰² After these comments were filed, the ITU completed its revisions

⁹³ USCG Comments (WT 00-48) at 4; RBAW Comments at 1.

⁹⁴ USCG Comments (WT 00-48) at 4-5.

⁹⁵ *GMDSS FNPRM*, 17 FCC Rcd at 6784 ¶ 118.

⁹⁶ *Id.*

⁹⁷ The USCG did state that the Commission has traditionally grandfathered existing equipment for a considerable period of time after imposition of a new requirement, and that the USCG supports similar treatment here for existing VHF FM equipment. USCG Comments (WT 00-48) at 4-5.

⁹⁸ USCG Comments (WT 00-48) at 5.

⁹⁹ 47 C.F.R. § 80.225.

¹⁰⁰ *GMDSS FNPRM*, 17 FCC Rcd at 6784, ¶ 119.

¹⁰¹ *Id.* at 6784-85, ¶ 119.

¹⁰² USCG Comments (WT 00-48) at 5; RTCM Comments at 2; RBAW Reply Comments at 2. RBAW initially took the position that we should implement the proposed amendment of Section 80.225 immediately. RBAW Comments

(continued...)

to both Recommendation ITU-R M.493 and Recommendation ITU-R M.541, and the IEC adopted its Class D standard 62238 for DSC equipment. In light of these developments, we are requesting comment in the *GMDSS 2nd FNPRM* on whether we should amend section 80.225 to incorporate ITU Recommendation ITU-R M.493-11, ITU Recommendation ITU-R M.541-9, and possibly IEC 62238.¹⁰³

H. Distress Call and Message Transmission Procedures

27. *Background.* Sections 80.320 through 80.326 of the Commission's rules provide the radiotelephone and radiotelegraph distress call and message transmission procedures.¹⁰⁴ Sections 80.327 through 80.329 describe urgency signals and messages, and safety signals.¹⁰⁵ In the *FNPRM*, the Commission sought further comment on a Task Force recommendation to revise these sections to incorporate DSC and GMDSS procedures.¹⁰⁶ The Commission noted that its existing distress call and message transmission procedures were consistent with international procedures, and that the ITU was expected to soon address the issue of whether there is still a need to specify radiotelegraph distress call and message transmission procedures in the international *Radio Regulations*.¹⁰⁷ The Commission accordingly questioned whether it should await the results of the international deliberations before making any changes in sections 80.320 to 80.329.¹⁰⁸

28. *Discussion.* After reviewing the scant record on this issue, we conclude that, at this time, we should amend sections 80.320 through 80.329 to eliminate the references to radiotelegraph operation, including the international radiotelegraph distress frequencies 500 kHz and 8364 kHz.¹⁰⁹ In the *GMDSS R&O*, the Commission concluded that it should delete all references in Part 80 to 500 kHz and 8364 kHz as distress and safety frequencies, as these frequencies are not currently in use.¹¹⁰ At that time, the Commission inadvertently failed to delete the references to 500 kHz and 8364 kHz in section 80.329(d) of the rules.¹¹¹ We rectify that oversight here.¹¹² In all other respects, we decline to revise these sections further. We may address this matter in a future proceeding upon the completion of international

(...continued from previous page)

at 2. In its Reply Comments, however, RBAW agreed with the USCG and RTCM that it is appropriate to defer any amendment of Section 80.225. RBAW Reply Comments at 2.

¹⁰³ See ¶ 79, *infra*.

¹⁰⁴ 47 C.F.R. §§ 80.320-80.326.

¹⁰⁵ *Id.* §§ 80.327-80.329.

¹⁰⁶ *GMDSS FNPRM*, 17 FCC Rcd at 6785, ¶ 120.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ See Owen Anderson Comments at 5 (recommending that the Commission amend sections 80.320-80.329 to eliminate the references to radiotelegraph operation, including the international radiotelegraph distress frequencies 500 kHz and 8364 kHz). The only commenter addressing this issue beside Owen Anderson is the USCG, which is not making a specific recommendation on this issue at this time. The USCG simply observes that it now appears unlikely that the ITU will address the issue of distress call and message transmission procedures at the next World Radio Conference, and thus it will be 2006 or later before the ITU radio regulations are changed regarding this matter. The USCG indicates that it believes we should delete some of these provisions from the Commission's rules, but that it "will separately propose specific language to accomplish this." USCG Comments (WT 00-48) at 6.

¹¹⁰ *GMDSS R&O*, 17 FCC Rcd at 6760, ¶ 45.

¹¹¹ 47 C.F.R. § 80.329(d).

¹¹² In keeping with the Commission's determination in the *GMDSS R&O*, see note 110, *supra*, we will delete as obsolete all remaining references to the 500 kHz and 8364 kHz distress frequencies throughout Part 80, not just the references in the rules governing distress call and message transmission procedures.

deliberations.

I. INMARSAT-E EPIRBS

29. *Background.* In the *FNPRM*, the Commission invited comment on USCG and Task Force proposals to authorize INMARSAT-E EPIRBS.¹¹³ The Commission noted that INMARSAT-E EPIRBS may offer a significant enhancement to maritime safety because, *inter alia*, the distress signal that INMARSAT-E EPIRBS transmit to INMARSAT geostationary satellites includes location data derived from a GPS navigational satellite receiver inside the EPIRB; INMARSAT-E EPIRBS may be detected anywhere in the world between 70 degrees North latitude and 70 degrees South latitude; and alerts are transmitted nearly instantly to a rescue coordination center associated with the INMARSAT coast earth station receiving the alert.¹¹⁴ The Task Force recommended that the Commission amend its rules to permit the use of INMARSAT-E EPIRBS by U.S. vessels operating solely within the INMARSAT coverage footprint, provided that the INMARSAT-E EPIRB incorporates a 121.5 MHz homing capability, a strobe light, and an integral GPS receiver.¹¹⁵ The USCG stated that it has no objection to permitting the use of INMARSAT-E EPIRBS, provided that the INMARSAT-E EPIRB, alone or in conjunction with the system within which it functions:

- provides for locating (homing) on 121.5 MHz;
- includes a strobe light which complies with RTCM Recommended Standards for 406 MHz EPIRBS, Version 2.1, August 22, 2000;
- requires a suitable two-step means of activation which complies with the RTCM standard;
- if intended for automatic activation, is designed to operate automatically only when the beacon is both out of its mounting bracket and submerged in water, in compliance with the RTCM standard;
- is capable of providing regular non-manual position updates after the beacon floats free;
- has an associated registration database that fully complies with the data requirements of IMO Assembly Resolution A.887(21); and
- complies with IEC 61097-5 Ed. 1.0, Global maritime distress and safety system (GMDSS) – Part 5: INMARSAT-E EPIRB operating throughout the INMARSAT system – Operational and performance requirements, methods of testing and required test results.¹¹⁶

The USCG added that, if we do authorize INMARSAT-E EPIRBS, we should amend section 80.1085(a)(6) of the rules¹¹⁷ to mandate annual testing, as is required for 406.0-406.1 MHz EPIRBS.¹¹⁸ The Commission invited interested parties to address whether the conditions set forth above are necessary and sufficient, and to suggest additional conditions.¹¹⁹

¹¹³ *GMDSS FNPRM*, 17 FCC Rcd at 6785-86, ¶ 121.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ 47 C.F.R. § 80.1085(a)(6).

¹¹⁸ *GMDSS FNPRM*, 17 FCC Rcd at 6786, ¶ 121.

¹¹⁹ *Id.*

30. *Discussion.* We agree with the commenters that INMARSAT-E EPIRBs represent an important tool for improving maritime safety and have gained international acceptance, and that we should authorize their use.¹²⁰ We conclude that we should model the equipment certification process for INMARSAT-E EPIRBs on the process for 406-406.1 MHz EPIRBs, as set forth in section 80.1061 of the Commission's rules.¹²¹ That process has worked well, and there is no reason it should not be adaptable to INMARSAT-E EPIRBs. Accordingly, as a starting point, we will incorporate by reference IEC 61097-5, and require that all INMARSAT-E EPIRBs meet the requirements of that standard.¹²² We will also mandate, as we do with respect to 406-406.1 MHz EPIRBs pursuant to section 80.1061(b), that INMARSAT-E EPIRBs have a 121.5 MHz homing beacon, consistent with the recommendations of the USCG, the Task Force, and RTCM.¹²³ The standards for 121.5 MHz beacons are incorporated in Annex B of IEC 61097-5, and we will require all INMARSAT-E EPIRBs to comply with Annex B. We decline to adopt the remainder of the conditions proposed by the USCG – regarding a strobe light, a two-step means of activation, compliance with RTCM standards for automatic activation, and the capability of providing regular non-manual position updates after the beacon floats free – because all of these capabilities are already incorporated in the existing standard, and we see no reason to add what would be essentially redundant requirements. With regard to the registration database requirement, we note that INMARSAT-E EPIRBs must be registered with INMARSAT. We do not have authority to direct INMARSAT to make changes to its database, and we have no reason to believe that its database is deficient. Finally, we decline at this time to mandate the additional requirements¹²⁴ and testing¹²⁵ suggested by RTCM because we have no reason to believe that the testing requirements set forth in IEC 61097-5 are not sufficiently rigorous. However, we may revisit this issue if circumstances warrant.

¹²⁰ See USCG Comments (WT 00-48) at 6; Task Force Comments at 5; RTCM Comments at 2; RBAW Comments at 2; Dr. Schenk of America LLC Comments at 1.

¹²¹ 47 C.F.R. § 80.1061.

¹²² See USCG Comments (WT 00-48) at 6; RTCM Comments at 2; RBAW Comments at 2; *contra*, Dr. Schenk of America LLC Comments at 1.

¹²³ USCG Comments (WT 00-48) at 6; Task Force Comments at 5; RTCM Comments at 2-7; *accord* RBAW Comments at 2. RTCM notes that mandating a 121.5 MHz homing device is important because IEC 61097-5 only provides for an optional 121.5 MHz homing device. RTCM Comments at 2.

¹²⁴ RTCM Comments at 2-7. RTCM recommends specifically that we: (1) mandate a 121.5 MHz homing device, since it is only optional under IEC 61097-5; (2) specify a light flash rate and flash duration for the strobe light; (3) not include any special requirement for a special manual switch; (4) not include any special requirement for automatic activation; (5) require that INMARSAT-E EPIRBs be equipped with a Global Navigation Satellite System (GNSS) receiver to ensure regular non-manual position updates; (6) mandate registration of the INMARSAT-E EPIRBs, as was done with 406-406.1 MHz EPIRBs; (7) mandate a USCG-approved float-free mechanism; and (8) add a number of tests to the certification process for INMARSAT-E EPIRBs, including a 1 m drop test, a more stringent immersion test, a test of the self-test function, a humidity test, and an orientation test. *Id.*

¹²⁵ RTCM recommends, for example, that the Commission require compliance with the immersion test specified in the RTCM standards (paragraph A9.0), which is more comprehensive than the IEC 61097-5 immersion tests, and requires storage for one hour at 65 degrees Celsius, immediately followed by immersion in 20 degrees Celsius water for 48 hours. RTCM Comments at 4. Similarly, it notes that, while IEC 61097-5 includes a high-temperature thermal shock test, the RTCM standards (paragraph A11.1) include both this test and a low-temperature shock test where the EPIRB has been stowed at -30 degrees Celsius, is immediately immersed in 0 degrees Celsius water and is required to operate. RTCM recommends mandating the low-temperature shock test. *Id.* Although it can reasonably be posited that requiring more stringent testing may result in EPIRBs of greater durability, RTCM does not explain why the IEC standards should not be viewed as adequate, especially given their international acceptance and endorsement by the U.S. Coast Guard, and offers no analysis of why the incremental gains in EPIRB durability outweigh the (unquantified) costs of mandating the additional testing.

31. Before submitting an application to the Commission for certification of an INMARSAT-E EPIRB, applicants must have the device certified by INMARSAT- or USCG-recognized test facilities to ensure compliance with both the Commission's technical requirements and USCG environmental and operational requirements, and secure a letter from the USCG that states that the radiobeacon satisfies all requirements. The application to the Commission must include that USCG letter, a copy of the technical test data, and the instruction manual(s), just as we require for 406-406.1 MHz EPIRBs.¹²⁶ Finally, as proposed by the USCG, we will amend section 80.1085(a)(6) to mandate annual testing of INMARSAT-E EPIRBs.¹²⁷

J. Small Passenger Vessels

1. DSC Upgrades of VHF and MF Radios

32. *Background.* In the *FNPRM*, the Commission sought further comment on its proposal in the *GMDSS NPRM*¹²⁸ to amend section 80.905(a)(1)-(4) of its rules,¹²⁹ which sets forth the equipment requirements applicable to small passenger vessels, to require that the VHF and MF radios required in these sections be DSC-equipped.¹³⁰ The USCG and Task Force concurred in the *FNPRM* proposal, and the Task Force also recommended that we require upgrades to VHF-DSC within one year after the USCG declares Sea Area A1 operational, and to MF-DSC within one year after the USCG declares Sea Area A2 operational.¹³¹ The Commission noted in the *FNPRM* that this rule change would in effect impose a GMDSS requirement on small passenger vessels, which are not covered by the GMDSS rules.¹³²

33. *Discussion.* After reviewing the augmented record, we conclude that we should amend section 80.905(a), as proposed, to require the inclusion of DSC capability in the VHF and MF radios already mandated by the rule.¹³³ Requiring DSC capability in the VHF and MF radio equipment carried by small passenger vessels will promote maritime safety by including these vessels in the common GMDSS distress and safety system, benefiting not only the operators, crew and passengers of small passenger vessels, but all GMDSS participating vessels.¹³⁴

34. The USCG and the Task Force reiterate their strong support for this proposal, noting the important safety benefits of mandating a DSC upgrade for the VHF and MF radio equipment carried on small passenger vessels.¹³⁵ We note that the only commenter opposing this proposal, PVA, does not

¹²⁶ See 47 C.F.R. § 80.1061(c)-(d).

¹²⁷ We note that no commenters specifically addressed the annual testing proposal. We agree with the USCG that annual testing is appropriate because we can discern no principled basis for treating INMARSAT-E EPIRBs differently from 406-406.1 MHz EPIRBs in this regard.

¹²⁸ *GMDSS NPRM*, Appendix A, 15 FCC Rcd at 5984.

¹²⁹ 47 C.F.R. § 80.905(a)(1)-(4).

¹³⁰ See *GMDSS FNPRM*, 17 FCC Rcd at 6786, ¶ 122.

¹³¹ See *id.*

¹³² *Id.*

¹³³ We also agree with the USCG that the class of DSC equipment needs to be specified, and we will amend the rules to require that the DSC-equipped radios required by this section meet ITU-R Rec. M.493 (series) Class A, B or D for VHF and Class A, B or E for MF.

¹³⁴ According to the USCG, "IMO organizations have recognized the value of GMDSS techniques (suitably scaled for other than mandatory equipped GMDSS vessels) in enhancing maritime safety." USCG Comments (WT 00-48) at 6-7.

¹³⁵ USCG Comments (WT 00-48) at 6; Task Force Comments at 5. See also Neuman Comments at 2 ("The SOLAS requirement is better served by requiring all ships that carry passengers (including the Charter Boat Industry) to have

(continued....)

directly dispute the significant public safety benefits this rule change will provide.¹³⁶ PVA believes, however, that the benefits are outweighed by the costs.¹³⁷ We do not lightly impose what are GMDSS requirements on vessels not required by the SOLAS Convention to meet those requirements. PVA contends that instead of imposing what are GMDSS-derived equipment requirements on vessels exempt from GMDSS requirements under SOLAS, the Commission should broaden the exemption to cover all passenger-carrying vessels, irrespective of size, that operate in protected waterways, such as harbors, bays and waterways covered by Vessel Traffic Systems (VTS).¹³⁸ However, we do not believe the costs incurred by the small passenger industry to comply with the DSC requirement will be significant. We note in this regard that, pursuant to section 80.203(n) of the Commission's rules,¹³⁹ all VHF and MF marine radio transmitters submitted for equipment authorization on or after June 17, 1999 must have DSC capability. Further, we adopt the Task Force's proposal to defer the requirement to upgrade VHF equipment to DSC until one year after the USCG declares Sea Area A1 operational, and to defer the requirement to upgrade MF equipment to DSC until one year after the USCG declares Sea Area A2 operational.¹⁴⁰ We agree with the USCG that giving the small passenger vessel industry notice at this time of requirements that will not take effect until one year after Sea Area A1 and Sea Area A2 become operational "will allow for the orderly procurement and installation of equipment, if necessary."¹⁴¹

2. DSC Upgrades for Single Sideband (SSB) Radios

35. *Background.* Section 80.905 also specifies that small passenger vessels operating more than 100 nautical miles from shore must carry SSB radios.¹⁴² In the *FNPRM*, the Commission sought comment on the USCG's recommendation that newly fitted SSB radios required by these sections be DSC-equipped in accordance with ITU-R Rec. (series) M.493 Class A, B or E.¹⁴³ The USCG reasoned that this proposed DSC requirement was warranted because ships operating on an HF transceiver may not be able to reliably contact the USCG on these radios in an emergency due to a lack of coast stations receiving such transmissions, whereas the USCG has implemented HF-DSC capability at various coast communications stations.¹⁴⁴

36. *Discussion.* Based on the present record, we amend section 80.905 to require that vessels

(...continued from previous page)

DSC equipment that meets/exceeds the Sea Area A1 and/or A2 [sic]. DSC transmission will get through when voice transmission will not.").

¹³⁶ See PVA Comments at 1-2. We have nothing in the record to quantify the compliance costs that will be incurred by small passenger vessels, even though the Commission specifically inquired about the propriety of imposing this requirement on small passenger vessels in the *FNPRM*. See *GMDSS FNPRM*, 17 FCC Rcd at 6786, ¶ 122.

¹³⁷ PVA asserts that the vast majority of U.S. passenger vessel operating companies are small businesses, and many can be characterized as "mom and pop operations." PVA Comments at 1.

¹³⁸ To the extent that PVA's intention is to actually propose such a relaxation of the scope of the GMDSS requirements, we believe it falls outside the scope of the *FNPRM*.

¹³⁹ 47 C.F.R. § 80.203(n).

¹⁴⁰ Task Force Comments at 5.

¹⁴¹ USCG Comments (WT 00-48) at 6.

¹⁴² 47 C.F.R. § 80.905(a)(3)(iii)(A), (4)(iii)(A).

¹⁴³ See *GMDSS FNPRM*, 17 FCC Rcd at 6786, ¶ 123. The Commission also sought comment on the Task Force's assertion that vessels operating over 200 nautical miles from shore should not be permitted to use an SSB radio in lieu of the HF-DSC channels prescribed for GMDSS. *Id.* In the absence of any comments directly addressing this issue, we decline to take any action.

¹⁴⁴ See *id.*

operating more than 100 nautical miles from shore carry DSC-equipped SSB radios.¹⁴⁵ We believe that the same safety considerations that militate in favor of a DSC requirement for VHF and MF radio equipment apply equally, if not more, to a DSC requirement for SSB radios on vessels traveling more than 100 nautical miles from shore. The USCG, the only party directly commenting on this issue, states that, as in the case of VHF and MF radio equipment, requiring DSC capabilities in SSB equipment is warranted because the “benefits of DSC techniques and the enhanced level of distress alert processing over existing voice radios are well understood and accepted.... Utilizing DSC techniques will enable the mariner to alert nearby shipping as well as shore facilities that have already ceased guarding SSB frequencies.”¹⁴⁶ No party has opposed the proposal or attempted to quantify the costs of compliance. On this record, then, we believe considerations of maritime safety must be given paramount weight. To give affected parties sufficient time to prepare for this new requirement, we will defer the effective date until one year after the effective date of these rules.

3. INMARSAT Ship Earth Stations

37. *Background.* Section 80.905 also permits ships operating more than 100 nautical miles from shore to carry INMARSAT ship earth stations in lieu of an SSB radio.¹⁴⁷ The USCG recommended that we revise section 80.905 to limit the ship earth stations authorized by that section to INMARSAT A (existing units only), B, C or M.¹⁴⁸ The USCG reasoned that such a requirement is necessary because the other INMARSAT units available for purchase do not have distress calling functions.¹⁴⁹ The Commission invited comment on this proposal.¹⁵⁰

38. *Discussion.* Based on the record evidence, we limit the types of INMARSAT earth stations that may be carried in lieu of the SSB otherwise required under the rule, as proposed by the USCG.¹⁵¹ Limiting the earth stations authorized by section 80.905 to INMARSAT A (existing units only), B, C or M earth stations represents a reasonable compromise between tightening the existing rule for safety reasons while according a limited measure of flexibility to small passenger vessel operators in meeting the requirement. In addition, we note that the IMO now accepts the INMARSAT F-77 earth station as meeting GMDSS requirements, and the IEC has published certification standard 61097-13 for the INMARSAT F-77. We invite comment in the *GMDSS 2nd FNPRM* on whether to add the INMARSAT F-77 to the list of earth stations that may be used in lieu of an SSB radio pursuant to section 80.905.¹⁵²

¹⁴⁵ Such vessels are not relieved of the requirement to also carry a DSC-equipped VHF or MF radio pursuant to the amendment in this order of Section 80.905(a)(1).

¹⁴⁶ USCG Comments (WT 00-48) at 7.

¹⁴⁷ 47 C.F.R. § 80.905(a)(3)(iii)(B), (4)(iii)(B).

¹⁴⁸ See *GMDSS FNPRM*, 17 FCC Rcd at 6787, ¶ 124.

¹⁴⁹ See *id.*

¹⁵⁰ *Id.*

¹⁵¹ The Task Force recommends that we add the INMARSAT Mini-M to the list of approved ship earth stations. Task Force Comments at 5. We decline to do so because the INMARSAT Mini-M does not have the distress alert processing capabilities that we believe should be included in any ship earth station that is intended for use in lieu of an SSB radio. We note, in this regard, that the USCG continues to adhere to the view that only INMARSAT A (existing units only), B, C, or M earth stations should be permitted because of their superior ability to ensure priority processing of distress messages. USCG Comments (WT 00-48) at 7. Neuman, on the other hand, contends that INMARSAT M earth stations should be removed from the list because of the same concern to ensure priority processing of distress messages. Neuman Comments at 2.

¹⁵² See ¶ 80, *infra*.

4. Reserve Power Supplies

39. Section 80.905 of the Commission's rules mandates that vessels required to carry SSB radios must also carry reserve power supplies capable of powering SSB radios.¹⁵³ In order to maintain consistency with changes to section 80.1099, which concerns the testing of battery chargers, the USCG proposed the addition of the words "including the navigation receiver referred to in § 80.905(a)(5)" at the end of these subparagraphs.¹⁵⁴ The Commission invited comment on this proposal. The USCG was the sole commenter addressing this issue, and it continues to urge Commission adoption of its proposal for reserve power supplies.¹⁵⁵ The USCG reasons that "[e]nsuring that certain equipment has a reliable source of power during an emergency can only improve the safety of all concerned."¹⁵⁶ We agree, and we accordingly amend the rule to extend the reserve power supply requirement to the navigation receiver.

5. Updating Position Information

40. The Commission sought comment on a USCG proposal to add a new paragraph (a)(5) to section 80.905, to state "All vessels must additionally meet the requirements of section 80.1085(e)."¹⁵⁷ The USCG reasoned that the same requirements for updating position information used in automated distress alerting systems, as proposed by the Commission in section 80.1085, are applicable to this section as well.¹⁵⁸ The Commission sought public comment on this proposal, noting that the proposed rule change would impose a GMDSS requirement on these small passenger vessels.¹⁵⁹ The USCG reiterates its support for this rule change, explaining that "[h]aving updated position information will enable the Coast Guard to locate distressed mariners in a more timely manner ... [and] better utilize its limited assets in a more efficient and fiscally responsible manner."¹⁶⁰ We adopt this requirement because it will enhance maritime safety. No party specifically opposed this proposal or introduced evidence that the costs of compliance with this requirement would outweigh its benefits.

K. GMDSS Rules

1. Dedicated Radio Operator During Distress Situations

41. *Background.* In the *FNPRM*, the Commission invited comment on a USCG proposal to add to section 80.1073 of the rules¹⁶¹ a specific requirement that on passenger ships, at least one qualified person must be assigned to perform only radio communications duties during distress situations.¹⁶² The Commission asked commenters to consider whether the proposed amendment was necessary in light of the existing rule, which mandates that a qualified GMDSS radio operator be available to act as a

¹⁵³ 47 C.F.R. § 80.905(a)(3)(iv), (4)(iv).

¹⁵⁴ *GMDSS FNPRM*, 17 FCC Rcd at 6787, ¶ 125.

¹⁵⁵ USCG Comments (WT 00-48) at 7.

¹⁵⁶ *Id.*

¹⁵⁷ *GMDSS FNPRM*, 17 FCC Rcd at 6787, ¶ 125. The correct reference is to 47 C.F.R. § 80.1085(c) (as amended by the *GMDSS R&O*), rather than 47 C.F.R. § 80.1085(e).

¹⁵⁸ *See id.*

¹⁵⁹ *Id.*

¹⁶⁰ USCG Comments (WT 00-48) at 7.

¹⁶¹ 47 C.F.R. § 80.1073.

¹⁶² *GMDSS FNPRM*, 17 FCC Rcd at 6787, ¶ 126.

dedicated radio operator in cases of distress on all ships subject to GMDSS requirements.¹⁶³

42. *Discussion.* Although we appreciate the maritime safety rationale behind the USCG's proposal to mandate that at least one qualified person on a passenger ship must be assigned to perform only radio communications duties during distress situation, the record evidence does not establish that adoption of this proposal would result in significant safety benefits beyond those that are already realized by virtue of the existing section 80.1073(b)(1) requirement. Although the USCG renews its support for its proposal,¹⁶⁴ no other commenter supports the proposal.¹⁶⁵ In addition, PVA persuasively argues that adoption of the proposal could constitute a potentially significant burden for small passenger vessel operators,¹⁶⁶ and could also be counterproductive by usurping the authority of the Master of the vessel to allocate personnel resources as he or she thinks best in a distress situation.¹⁶⁷ We are not prepared to say that an emergency situation could never arise in which the Master of the vessel might reasonably redeploy a qualified radio operator to perform a non-communications-related task at some point during the emergency before directing the operator to resume his or her radio duties. Accordingly, we continue to believe that it is sufficient that the Commission's rules mandate that a qualified GMDSS radio operator be available to act as a dedicated radio operator in cases of distress, and that dictating the actual function to be performed by that operator at all times during an emergency would constitute a type of micromanagement that the Commission strives to avoid.¹⁶⁸

2. Ship Radio Installations

43. *Background.* Section 80.1083 of the Commission's rules governs the requirements for ship radio installations.¹⁶⁹ Based on a USCG recommendation, the Commission proposed in the *FNPRM* to add the following requirements to section 80.1083 in order to incorporate new SOLAS regulations:

- In passenger ships, a distress panel shall be installed at the conning position. This panel shall contain either one single button which, when pressed, initiates a distress alert using all radiocommunications installations required on board for that purpose or one button for each individual installation. The panel shall clearly and visually indicate whenever any button or buttons have been pressed. Means shall be provided to prevent inadvertent activation of the button or buttons. If the satellite EPIRB is used as the secondary means of distress alerting and is not remotely activated, it shall be acceptable to have an additional EPIRB installed in the wheelhouse near the conning position.
- In passenger ships, information on the ship's position shall be continuously and automatically provided to all relevant radiocommunications equipment to be included in the initial distress alert when the button or buttons on the distress panel is pressed.

¹⁶³ *Id.* (citing 47 C.F.R. § 80.1073(b)(1)).

¹⁶⁴ USCG Comments (WT 00-48) at 7.

¹⁶⁵ See PVA Comments at 1-2; Owen Anderson Comments at 6. The Task Force did not comment on this proposal.

¹⁶⁶ PVA Comments at 1-2 ("The requirement for a dedicated, GMDSS qualified resource imposes costs for crew and training without any discussion or demonstration of benefit. This individual would have to have some functional role within the crew beyond the one that hopefully and probably will never be needed").

¹⁶⁷ *Id.* at 1.

¹⁶⁸ See, e.g., The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, *Second Memorandum Opinion and Order*, WT Docket No. 96-86, 15 FCC Rcd 16844, 16882, ¶ 81 (2000) (declining to micromanage Part 90 frequency coordinators' approach to frequency coordination).

¹⁶⁹ 47 C.F.R. § 80.1083.

- In passenger ships, a distress alarm panel shall be installed at the conning position. The distress alarm panel shall provide visual and aural indication of any distress alert or alerts received on board and shall also indicate through which radiocommunication service the distress alerts have been received.¹⁷⁰

44. *Discussion.* We adopt the proposed amendment to section 80.1083, as set forth in the *FNPRM*, notwithstanding the concerns expressed by some commenters regarding the sentence that reads, “If the satellite EPIRB is used as the secondary means of distress alerting and is not remotely activated, it shall be acceptable to have an additional EPIRB installed in the wheelhouse near the conning position.” These commenters state that an EPIRB mounted inside a steel wheelhouse would be of dubious utility because of the attenuation of its signal and because it would lack float-free capability.¹⁷¹ We are not troubled by these concerns about the efficacy of a wheelhouse-mounted EPIRB because, as the sentence makes clear, all that is being done is to authorize the use of such an EPIRB as a *backup* on a *permissive* basis. No one is required to install such an EPIRB, and no one is permitted to place primary reliance on such an EPIRB. We assume, moreover, that this provision contemplates that the EPIRB will be taken outside before activation.

3. Capability for Two-Way Communication on Aeronautical Frequencies

45. *Background.* The Commission proposed to incorporate into section 80.1085 of its rules¹⁷² the SOLAS requirement that every passenger ship be provided with means for two-way on-scene radiocommunications for search and rescue purposes using the aeronautical frequencies 121.5 and 123.1 MHz from the position from which the ship is normally navigated.¹⁷³ Comment was invited on this proposal, which was based on a USCG recommendation.¹⁷⁴

46. *Discussion.* We will adopt the proposed requirement, which is supported by the USCG,¹⁷⁵ because it is already required internationally under SOLAS, and it will promote maritime safety by enabling passenger vessels to contact nearby aircraft to facilitate search and rescue operations. PVA argues that a requirement for on-scene radios with aeronautical frequencies is expensive and “has no foreseeable use outside of open ocean environments.”¹⁷⁶ PVA urges that we decline to impose this requirement upon passenger vessels operating in or near coastal, inland, and other protected waters.¹⁷⁷ More broadly, PVA complains that the USCG’s proposals in this proceeding indicate that the USCG is seeking to extend equipment requirements that are justified for vessels in open-ocean service to vessels on domestic voyages.¹⁷⁸ “This domestication of international requirements,” PVA says, “imposes undue economic burdens on the U.S. flag fleet without demonstrating any safety benefits.”¹⁷⁹ Although we are mindful of PVA’s concerns that equipment requirements that make sense for vessels on the open-ocean not be extended without further analysis to vessels that stay closer to shore, we disagree that an on-scene

¹⁷⁰ *GMDSS FNPRM*, 17 FCC Rcd at 6787-88, ¶ 127.

¹⁷¹ Task Force Comments at 5; Neuman Comments at 2; Owen Anderson Comments at 6.

¹⁷² 47 C.F.R. § 80.1085.

¹⁷³ *GMDSS FNPRM*, 17 FCC Rcd at 6788, ¶ 128.

¹⁷⁴ *Id.*

¹⁷⁵ USCG Comments (WT 00-48) at 7.

¹⁷⁶ PVA Comments at 2.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

capability for two-way radiocommunications with aircraft using the aeronautical frequencies 121.5 and 123.1 MHz offers no potential safety benefits to vessels on domestic voyages. We believe that the ability to communicate with helicopters or other aircraft involved in search and rescue operations could save lives where, for example, a passenger vessel catches fire and is exuding thick smoke on an inland waterway. Further, we do not believe that adopting this requirement in the Part 80 rules imposes a new compliance cost on passenger vessels since the requirement was imposed internationally well before the release of this order. In addition, because the safety benefits of this requirement are not dependent on GMDSS implementation, and because passenger vessels are already required to have this capability under SOLAS, there is no reason to defer the effective date of this requirement to one year after Sea Area A1 or Sea Area A2 implementation, as we have done with some of the other requirements adopted herein in the interest of reducing compliance costs.¹⁸⁰ However, we believe it is appropriate to defer the effective date for this requirement for some shorter period in order to mitigate the compliance costs for small passenger vessel operators. Accordingly, we will make this requirement effective six months after publication of the amended rule in the Federal Register.

L. Electronic Mail (E-Mail) Requests

47. In the *FNPRM*, the Commission solicited comment on a Task Force proposal to allow e-mail as a permitted mode for making official requests and reports required under Part 80 of the Commission's rules.¹⁸¹ The Commission asked commenters to explain why it should adopt a rule on electronic filing that is specific to Part 80, instead of addressing the issue more broadly.¹⁸² In response, the commenters uniformly urge that we permit e-mail submissions.¹⁸³ The USCG avers that allowing the use of e-mail for submissions to the Commission would ensure more timely reporting, ease paperwork burdens, and potentially result in significant cost savings.¹⁸⁴ Maritel adds that the Commission should expand the capabilities of its Universal Licensing System (ULS) to accommodate Part 80-related reports and requests.¹⁸⁵ We agree with the commenters that electronic filing, including e-mail submissions, offer potentially significant efficiency and cost advantages over paper filing, especially now that mailings to the Commission undergo irradiation. The Commission is actively pursuing ways in which to expand electronic filing opportunities, including e-mail submissions, and we will certainly take account of the needs and wishes of the maritime community as we continue this effort. At this time, however, we decline to adopt a Part 80-specific rule for electronic filing because we believe this issue is one of Commission-wide applicability, equally affecting licensees in a number of different services. We note, moreover, that applications¹⁸⁶ for Part 80 licenses may be filed in ULS already, on FCC Form 605.¹⁸⁷ To the extent that commenters or other members of the marine radio community wish to avail themselves of

¹⁸⁰ See para. 34, *supra*.

¹⁸¹ *GMDSS FNPRM*, 17 FCC Rcd at 6788, ¶ 129.

¹⁸² *Id.*

¹⁸³ USCG Comments (WT 00-48) at 8; Task Force Comments at 5; Maritel Comments (WT 00-48) at 8.

¹⁸⁴ USCG Comments (WT 00-48) at 8.

¹⁸⁵ Maritel Comments (WT 00-48) at 8.

¹⁸⁶ At present, ULS does not have the capability of processing pleadings, such as petitions to deny, for any of the wireless services. See *Certain Actions Provided For in the Commission's Rules Are Not Yet Available for Electronic Filing Via the Universal Licensing System (ULS) and Must Be Filed Manually*, *Public Notice*, 16 FCC Rcd 12886 (2001).

¹⁸⁷ On March 18, 2003, as part of an ongoing effort to enhance ULS, the Wireless Telecommunications Bureau implemented online filing for ship exemptions. See *Wireless Telecommunications Bureau Will Implement Online Filing for Ship Exemptions in the Universal Licensing System Beginning March 18, 2003*, *Public Notice*, 18 FCC Rcd 4952 (2003).

e-mail submissions of particular types of documents that are neither covered by ULS nor required by rule to be filed in paper with the Office of the Secretary, we suggest they contact appropriate staff of the Wireless Telecommunications Bureau (Bureau) to determine if they can be accommodated through informal arrangements.

M. Tabular Listings of Part 80 Frequencies

48. *Background.* In the *FNPRM*, the Commission questioned whether it should continue the practice of listing carrier frequencies rather than assigned frequencies in the frequency tables in Part 80 of its rules.¹⁸⁸ It noted that, although the carrier frequency is the frequency actually used by a licensee, the assigned frequency, which differs from the carrier frequency when emissions with a suppressed carrier are transmitted, is the frequency identified on the license.¹⁸⁹ Expressing concern that listing carrier frequencies alone may lead to some confusion, the Commission asked commenters to address the relative benefits of listing carrier frequencies, assigned frequencies or both frequencies in the Part 80 tables.¹⁹⁰

49. *Discussion.* Given that the three commenters addressing this issue propose three very different solutions, we believe that changing the current practice of listing carrier frequencies in the Part 80 tables would probably engender more confusion than maintaining the status quo. The USCG states that both the tables and licenses should include both assigned frequencies and carrier frequencies,¹⁹¹ while RBAW recommends that we continue to list the carrier frequency because it is more meaningful for most users of SSB radios.¹⁹² Owen Anderson argues that the Commission should list the carrier frequency for SSB voice frequencies but we should list the assigned frequency for SITOR (Simplex Teletype Over Radio) frequencies,¹⁹³ inasmuch as this is the way the frequency display table works on most equipment.¹⁹⁴ We agree with RBAW that the Commission should continue to use the carrier frequency in the Part 80 tables. The USCG's preferred approach of listing both frequencies would make the tables cumbersome, and could as easily result in more instances of a licensee using the "wrong" frequency.¹⁹⁵ We also believe it could be more confusing to list carrier frequencies in some tables and assigned frequencies in other tables. Under the current approach, licensees can be sure that the frequency listed is always the carrier frequency.¹⁹⁶ Maintaining the existing practice promotes regulatory stability and avoids any additional confusion that might be engendered among those licensees who might only belatedly become aware of any change in the practice. Importantly, we have no evidence that our current practice has resulted in actual confusion and unauthorized operations to any appreciable degree.¹⁹⁷ Accordingly, we will continue to list carrier frequencies in the Part 80 tables of frequencies.

¹⁸⁸ *GMDSS FNPRM*, 17 FCC Rcd at 6788, ¶ 130.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ USCG Comments (WT 00-48) at 8.

¹⁹² RBAW Comments at 2.

¹⁹³ SITOR is another name for narrow-band direct-printing (NBDP), an automated direct printing service.

¹⁹⁴ Owen Anderson Comments at 6.

¹⁹⁵ Owen Anderson also asserts that it would be confusing to list both the carrier and the assigned frequencies. *Id.*

¹⁹⁶ We note, moreover, that our tables very clearly identify the frequencies as carrier frequencies at the top of the relevant column. *See, e.g.*, 47 C.F.R. §§ 80.313, 80.374(b)(2), (c)(2), 80.379(a).

¹⁹⁷ The USCG speaks of "the *potential* for engendering confusion and operation on an authorized frequency." USCG Comments (WT 00-48) at 8 (emphasis added). Although the USCG says the potential for confusion is increasing due to turnover in licensed radio personnel, it also notes that more modern equipment "has somewhat compensated." *Id.*

N. Examination Requirements for GMDSS Operators

50. *Background.* Currently, section 13.203(a)(5) of the Commission's rules provides that the written examination for Commercial Operator Licensing Examination Element 7, GMDSS radio operating practices, is to consist of seventy-six questions.¹⁹⁸ In the *FNPRM*, the Commission proposed to increase the number of questions in the Element 7 examination to 100 because it believed a 100-question examination would provide a better assessment of whether applicants have the necessary breadth of knowledge to qualify as a GMDSS operator.¹⁹⁹ In addition to inviting comment on this proposal, the Commission invited suggestions regarding the appropriate number of questions for the written examination for new Element 7R that will be associated with the restricted GMDSS Radio Operator's License that was established in the *GMDSS R&O*.²⁰⁰

51. *Discussion.* Based on the record evidence, we adopt the proposal to expand the Element 7 examination to 100 questions, and specify that the examination for Element 7R shall consist of fifty questions drawn from a 300-question pool. Both of these decisions comport with the consensus view of the commenters.²⁰¹ We believe that a 100-question examination is more appropriate than a 76-question examination for Element 7, given the scope and complexity of the GMDSS radio operating procedures. We also note that the Bureau's Public Safety and Private Wireless Division (PSPWD) has already permitted the use of 100-question examinations pursuant to waiver,²⁰² and our positive experience with such examinations indicates that it will serve the public interest to make the 100-question examination mandatory rather than permissive. We further believe that a fifty-question examination drawn from a pool of 300 questions is appropriate for Element 7R given the more limited authority conveyed by a Restricted GMDSS Radio Operator's License vis-à-vis the (unrestricted) GMDSS Radio Operator's License. In keeping with traditional practice, we will consult closely with the USCG in developing the question pool, and we will announce the availability of the question pool by Public Notice.²⁰³

O. Cross-references

52. The Commission noted in the *FNPRM* that section 80.1103 of its rules²⁰⁴ contains cross-references to sections 2.975 and 2.983, both of which were deleted effective October 5, 1998.²⁰⁵ The

¹⁹⁸ 47 C.F.R. § 13.203(a)(5).

¹⁹⁹ *GMDSS FNPRM*, 17 FCC Rcd at 6789, ¶ 131.

²⁰⁰ *Id.* (citing *GMDSS R&O*, 17 FCC Rcd at 6749, ¶ 13). Commenters were also invited to propose language to include in Section 13.203 prescribing the matters to be covered by the Element 7R questions. *Id.* None of the commenters responded to that invitation.

²⁰¹ USCG Comments (WT 00-48) at 8 (supporting a 100-question examination for Element 7 and an examination of no less than fifty questions for Element 7R); Task Force Comments at 6 (reiterating its support for a single examination to satisfy both FCC and USCG GMDSS requirements and recommending that the examination for Element 7R consist of fifty questions drawn from a 300-question pool); Owen Anderson Comments at 6 (agreeing that the Element 7 examination should have 100 questions, and observing that the USCG has approved a Restricted GMDSS STCW Model Course which provides for a written examination of fifty questions drawn from a pool of 300 questions).

²⁰² See National Radio Examiners, Request for Waiver of Section 13.203 of the Commission's rules, *Order*, 17 FCC Rcd 50 (2001) (*NRE Waiver Order*). Pursuant to the reorganization of the Wireless Telecommunications Bureau, PSPWD no longer exists, but many of its functions, including oversight of the commercial radio operator license examination rules and procedures, have been assumed by the Public Safety and Critical Infrastructure Division.

²⁰³ See 47 C.F.R. § 13.215.

²⁰⁴ 47 C.F.R. § 80.1103.

²⁰⁵ *GMDSS FNPRM*, 17 FCC Rcd at 6789, ¶ 132.

Commission requested comment on how best to revise section 80.1103 to reflect the deletion of the two Part 2 rules, and also asked commenters to identify any other rules in Part 80 that may have obsolete or inaccurate cross-references.²⁰⁶ We received no responsive comments. Accordingly, we amend subparagraphs (b) and (c) of section 80.1103 to remove the references to old sections 2.983 and 2.975, respectively, and to instead require compliance with section 2.1033 (governing applications for certification of equipment)²⁰⁷ or sections 2.953 and 2.955 (governing requirements for parties seeking authorization of equipment under the verification procedures),²⁰⁸ as appropriate. We also amend section 80.1061 of the Commission's rules²⁰⁹ to remove an obsolete reference to deleted section 2.1003, and replace it with a reference to sections 2.925 and 2.926,²¹⁰ the current Part 2 rules governing equipment identification. We are unaware of any other obsolete or inaccurate cross-references that need to be addressed.

IV. VHF PUBLIC COAST STATIONS SIXTH REPORT AND ORDER

A. Distress Communications

53. *Background.* Currently, the Commission requires site-based as well as geographic area VPC licensees to maintain a continuous safety watch on VHF Channel 16 unless exempted.²¹¹ Under section 80.303(b), we exempt a VPC licensee if a federal, state, or local government station maintains such a watch over ninety-five percent of the VPC licensee's service area.²¹² In the *VPC 4th FNPRM*, the Commission invited comment on proposals by Maritel and the USCG regarding watch requirements for Channel 16, the VHF distress communications channel.²¹³ Maritel suggested that the Commission amend its regulations to require geographic area VPC licensees to maintain a Channel 16 safety watch only after (1) expiration of the licensee's construction requirement or construction of the licensee's facilities in an area; and (2) the licensee receives written notification from the Coast Guard to maintain a watch.²¹⁴ The Commission tentatively concluded that Maritel's first proposed condition was unnecessary because the existing rules require a VPC licensee to maintain a watch during a station's "hours of operation."²¹⁵ According to the Commission, the phrase "hours of operation" implied that a licensee is subject to watch requirements only when there is a fully constructed station.²¹⁶ The Commission further stated that, given the important safety purposes underlying the Channel 16 watch requirement, it was appropriate to impose on VPC licensees the responsibility to immediately initiate and maintain the watch, rather than to wait for written notification from the Coast Guard. The Commission sought comment on its tentative conclusion

²⁰⁶ *Id.*

²⁰⁷ 47 C.F.R. § 2.1033.

²⁰⁸ *Id.* §§ 2.953, 2.955

²⁰⁹ *Id.* § 80.1061.

²¹⁰ *Id.* §§ 2.925, 2.926.

²¹¹ *Id.* § 80.303. See Request for Waiver of the Requirements in Sections 80.303 and 80.453 of the Rules to Permit Public Coast Station WHU487 to Cease Safety Watch on 156.800 MHz and Serve Mobile Vehicles on Land, *Order*, 9 FCC Rcd 221, 221, ¶ 2 (1994).

²¹² 47 C.F.R. § 80.303(b).

²¹³ *VPC 4th FNPRM*, 17 FCC Rcd at 231-32, ¶¶ 6-8.

²¹⁴ See *id.* at 231, ¶ 6.

²¹⁵ *Id.* at 231, ¶ 7 (*citing* 47 C.F.R. § 80.303).

²¹⁶ *Id.*

to reject Maritel's recommendation.²¹⁷

54. The USCG recommended that we require VPC licensees to notify it in advance of any station relocation that will affect the licensee's VHF Channel 16 safety watch responsibility.²¹⁸ Maritel recommended that when a VPC licensee discontinues service, and such licensee is providing a watch under section 80.303 of the Commission's rules,²¹⁹ we should require the licensee to notify the Coast Guard thirty days in advance of such discontinuance.²²⁰ The Commission tentatively concluded that adoption of these recommendation was unnecessary because VPC licensees already must notify the nearest district office of the Coast Guard thirty days prior to discontinuing the watch pursuant to the section 80.303 exemption,²²¹ and as soon as practicable when changes occur in the operation of a public coast station, including discontinuance, reduction or suspension of a VHF Channel 16 safety watch.²²² Nevertheless, the Commission proposed to amend section 80.302(a) to make explicit that the rule also requires notification to the Coast Guard as soon as practicable when a VPC station with a VHF Channel 16 safety watch responsibility is relocated.²²³

55. *Discussion.* We affirm the tentative determinations made in the *VPC 4th FNPRM* regarding Channel 16 watch responsibilities. We adhere to the view, echoed by the USCG,²²⁴ that it is unnecessary to amend our rules to specify that a VPC licensee's Channel 16 safety watch requirement is triggered only after the licensee's construction requirement has expired or a licensee has actually constructed facilities in an area, and that it is inappropriate to specify that the watch requirement is triggered only after the licensee receives written notification from the Coast Guard.²²⁵ We continue to believe that the concerns underlying Maritel's first proposal – that we mandate a watch requirement only after the licensee's construction requirement has passed or a licensee has actually constructed facilities – are adequately addressed by the existing rule clearly specifying that the watch requirement applies only during the station's hours of operation.²²⁶ In addition, we believe maritime safety could be compromised unnecessarily if we permit a VPC licensee to avoid its Channel 16 watch requirement unless and until it receives written notification from the Coast Guard. We have imposed the watch requirement by rule on all coast stations, subject to the exemption codified in section 80.303(b). We see no purpose to be served by requiring the Coast Guard to in effect “remind” VPC licensees of their Commission-mandated watch responsibilities, and we also think it is the responsibility of the licensee, not the USCG, to determine whether the licensee is entitled to the exemption. This rationale is particularly true with respect to geographic area VPC licensees because they are not required to license each site individually,²²⁷ so the USCG may not be immediately aware of a new facility in operation.

56. The USCG and Maritel both continue to support a rule amendment mandating that a VPC

²¹⁷ *Id.*

²¹⁸ *See id.* at 231, ¶ 8.

²¹⁹ 47 C.F.R. § 80.303.

²²⁰ *See VPC 4th FNPRM*, 17 FCC Rcd at 231, ¶ 8.

²²¹ 47 C.F.R. § 80.303(b).

²²² *VPC 4th FNPRM*, 17 FCC Rcd at 231-32 ¶ 8 (*citing* 47 C.F.R. § 80.302(a)).

²²³ *Id.* at 232, ¶ 8.

²²⁴ USCG Comments (PR 92-257) at 1.

²²⁵ We observe that Maritel no longer presses these recommendations in its Comments or Reply Comments to the *VPC 4th FNPRM*.

²²⁶ 47 C.F.R. § 80.303(a).

²²⁷ 47 C.F.R. § 80.371(c)(4).

licensee notify the USCG prior to a station relocation that may affect a Channel 16 watch.²²⁸ We continue to believe that section 80.302(a) of the Commission's rules already mandates such notice, because we believe a relocation affecting a Channel 16 watch necessarily constitutes a "change[] in the operation of a public coast station which include[s] discontinuance, reduction, or suspension" of the watch, and thus requires notice to the nearest coast guard district office "as soon as practicable." However, based on the joint concerns of the USCG and Maritel, we will amend section 80.302(a) to clarify that "relocation" is a change that triggers the notification requirement.

57. In addition, Maritel seeks clarification concerning the extent to which the watch requirement applies to VPC stations that serve units on land. Maritel seeks clarification of whether stations "near coastal areas," but designed to serve land stations rather than ship stations, are subject to the watch requirement.²²⁹ Maritel notes²³⁰ that section 80.303 predates the Commission's decisions to license VPC operations on a geographic area basis²³¹ and to permit VPC stations to provide service to units on land.²³² First, we note that the watch requirement does not apply to VPC stations along the coasts serving the open sea and the Great Lakes; the requirement applies only to stations serving inland waterways.²³³ With respect to inland waterways, when the Commission adopted a geographic licensing framework, it noted that stations did not have to serve such waterways, "but if waterways are served, public coast stations' maritime obligations (*e.g.*, safety watch ...) shall apply."²³⁴ Maritel has provided no reason why we should reconsider this decision.²³⁵ Thus, in response to Maritel's query, we clarify that the watch requirement applies to any VPC station that has a navigable inland waterway within its service area, as determined in accordance with Subpart P of Part 80 of the Commission's rules.²³⁶

²²⁸ USCG Comments (PR 92-257) at 1-2; Maritel Comments (PR 92-257) at 3; Maritel Reply Comments (PR 92-257) at 3.

²²⁹ Maritel Comments (PR 92-257) at 3. Maritel also suggests that we revise the requirement that stations serving units on land provide priority to marine-originating communications, 47 C.F.R. § 80.123(b), to exempt stations near coastal areas. *Id.* at 4; Maritel Reply Comments (PR 92-257) at 3. We believe that this proposal is beyond the scope of the issues framed in the 4th FNPRM, which pertain to VPC stations' obligation to maintain a Channel 16 watch. We also note, however, that Maritel's suggestion is contrary to the Commission's intent when it adopted Section 80.123. *See VPC 2nd R&O*, 12 FCC Rcd at 16964, ¶ 25 (indicating that it is the Commission's intention to "require[e] public coast stations to give priority to maritime traffic, without regard to the number of land units being served"); *id.* at 16965, ¶ 26 (indicating that "[i]n order to preserve the core purpose of the internationally allocated marine radio spectrum," the requirements for public coast stations serving units on land "allow operational flexibility while ensuring that distress and safety communications from vessels at sea are given priority").

²³⁰ Maritel Comments (PR 92-257) at 3.

²³¹ *VPC Third R&O*, 13 FCC Rcd at 19859-60, ¶ 10.

²³² *VPC Second R&O*, 12 FCC Rcd at 16965-66, ¶¶ 23-26; *see also* 47 C.F.R. § 80.123.

²³³ *See* 47 C.F.R. § 303(a); *see also* Amendment of Part 81 of the Commission's rules to specify the circumstances under which Class III-B public coast stations may be exempted from the watch requirements on 156.8 MHz, *Report and Order*, PR Docket No. 79-68, 81 FCC 2d 340, 341, ¶ 5 (1980).

²³⁴ *VPC Third R&O*, 13 FCC Rcd at 19871, ¶ 36.

²³⁵ Even if we were inclined to lift the watch requirement for VPC stations that primarily but not exclusively serve land areas, we note that Maritel has not suggested any basis upon which to distinguish which stations are sufficiently near a waterway that the watch requirement should apply.

²³⁶ 47 C.F.R. §§ 80.751-80.773. We note that, for purposes of demonstrating that a VPC station is exempt from the watch requirement because a government station maintains a Channel 16 safety watch over ninety-five percent of the VPC station's service area, *see* 47 C.F.R. § 80.303(b), the VPC licensee need only show ninety-five percent coverage of the waterway(s) or portion(s) thereof that it serves, and not ninety-five percent of the covered land area. We do not believe that the Commission's decision to permit service to units on land changed the standard for qualifying for the exemption. *See* 47 C.F.R. § 80.303(b) (1997) (referring to VPC station's "receiving service area,"

(continued...)

B. Frequency Assignments

1. Specification of 12.5 kHz Channels

58. *Background.* Although channelization of VPC spectrum is based on 25 kHz channels, the Commission permits VPC licensees to operate on 12.5 kHz offset frequencies if the licensee's station is authorized to operate on both 25 kHz frequencies adjacent to the offset frequency.²³⁷ However, the Commission did not adopt technical rules to govern 12.5 kHz operation. Maritel requested that the Commission adopt such technical rules, and that it also include the 12.5 kHz offset channels in the VPC table of frequencies.²³⁸ Maritel states that it would like to conduct narrowband operations, but is impeded from doing so by the absence of such technical regulations.²³⁹ In the 4th FNPRM, the Commission responded to this request by noting that it did not adopt technical rules for narrowband operations when it authorized 12.5 kHz offset operations because it wanted to provide manufacturers and licensees with maximum flexibility, provided that emissions are attenuated at the edge of the licensee's contiguous 25 kHz channels.²⁴⁰ The Commission tentatively reaffirmed that decision, concluding that it should maintain the technical flexibility and should not adopt Maritel's recommended technical regulations.²⁴¹ The Commission invited comment on this issue, specifying that commenters who agree with Maritel's proposal should address whether any proposed technical requirements are consistent with international standards.²⁴²

59. The Commission did propose two rule changes, however. First, it proposed to amend section 80.213(d) of its rules²⁴³ to permit VPC equipment to operate with a frequency deviation that does not exceed +/- 5 kHz.²⁴⁴ The Commission proposed this amendment because the existing rule could be construed as requiring a frequency deviation of precisely +/- 5 kHz, which would not be compatible with 12.5 kHz narrowband operations.²⁴⁵ Second, the Commission proposed to amend the rules to clarify that offset operations require Canadian coordination whenever operation on either adjoining 25 kHz channel would require Canadian coordination.²⁴⁶

60. *Discussion.* Based on the record evidence, we remain unpersuaded that it would serve the public interest to adopt technical rules for the VPC narrowband offset channels. Maritel claims that the absence of such technical rules, and the failure to list available offset frequency assignments in a table of

(...continued from previous page)

which at that time could only include waterways; this language was removed when the Commission eliminated the requirement that qualified stations affirmatively apply for the exemption, *see VPC Third R&O*, 13 FCC Rcd at 19879, ¶ 57).

²³⁷ *See* 47 C.F.R. § 80.371(c)(1)(iii).

²³⁸ *See VPC 4th FNPRM*, 17 FCC Rcd at 232, ¶ 9.

²³⁹ *See id.* In April 2001, the Bureau's Public Safety and Private Wireless Division granted Maritel's request for waiver of certain Part 80 rules to permit certification of 12.5 kHz offset radio equipment. *See* Maritel, Inc., Request for Waiver of Part 80 Regulations to Permit Use of 12.5 kHz Radio Equipment Operating in the 156-162 MHz Frequency Band, *Order*, 16 FCC Rcd 9294 (2001) (*Maritel Waiver Order*).

²⁴⁰ *VPC 4th FNPRM*, 17 FCC Rcd at 233, ¶ 10.

²⁴¹ *Id.*

²⁴² *Id.* (citing ITU Radio Recommendation M.1084).

²⁴³ 47 C.F.R. § 80.213(d).

²⁴⁴ *VPC 4th FNPRM*, 17 FCC Rcd at 233, ¶ 11.

²⁴⁵ *Id.*

²⁴⁶ *Id.*

frequencies, is inconsistent with the Commission's approach to other services, in particular Part 90 private land mobile radio services, and "creates an uncomfortable level of uncertainty for manufacturers."²⁴⁷ Maritel asserts that, notwithstanding the waiver granted by the Bureau to permit certification of 12.5 kHz equipment,²⁴⁸ both manufacturers and licensees desire further technical guidance from the Commission in order to design equipment for and operate on the 12.5 kHz offset channels.²⁴⁹ It is not self-evident, however, why either manufacturers or VPC licensees would benefit from the imposition of technical rules for which the Commission otherwise sees no need. We find significant that although Maritel represents that manufacturers desire such technical regulations, not a single manufacturer filed comments in support of Maritel's proposal. In addition, to the extent that manufacturers desire "technical guidance," there are avenues for them to obtain it other than through the imposition of otherwise unneeded regulations.²⁵⁰ We continue to believe that we should provide flexibility to VPC manufacturers and licensees to the maximum possible extent, and we reaffirm our tentative conclusion in the 4th FNPRM that establishing detailed technical rules for the VPC offset channels is unnecessary.

61. Maritel's interest in having the offset channels designated as assignable frequencies in a Part 80 table appears to stem, at least in part, from a concern with language in section 80.211 of the Commission's rules, which specifies the emission limits for VPC operations.²⁵¹ Maritel states that its operations will be governed by section 80.211(f) because it will employ an emission class that is not specified in section 80.211(a)-(d). Section 80.211(f) specifies the required attenuation of emissions for a given frequency based on the degree to which that frequency is "removed from the assigned frequency."²⁵² According to Maritel, the reference to "assigned" frequencies presumably refers only to those frequencies listed in section 80.371(c) of the Commission's rules.²⁵³ Maritel therefore interprets the rule to mean that offset channels cannot be treated as assigned frequencies for purposes of the emission limits.²⁵⁴ If this interpretation is the case, Maritel claims that it will be unable to comply with the emission limits when it operates on offset channels because "the mean power of an offset channel would be strongest at the point where it should be weakest from the 'assigned frequency.'"²⁵⁵ Maritel concludes that, if the Commission determines not to add the offset channels to the table of frequencies, it should at least amend section 80.211(f) to require attenuation of emissions by reference to the "authorized" frequency, rather than the "assigned" frequency.²⁵⁶ We believe we can address Maritel's concern without amending section 80.211(f) by clarifying, as we now do, that for purposes of section 80.211(f) of our rules, the term "assigned frequency" includes any offset frequency utilized by a VPC licensee in accord

²⁴⁷ Maritel Comments (PR 92-257) at 5.

²⁴⁸ See *Maritel Waiver Order*, note 239, *supra*.

²⁴⁹ Maritel Comments (PR 92-257) at 5.

²⁵⁰ Manufacturers can obtain advice from the Commission through, for example, informal staff contacts, petitions for declaratory ruling, and the review of equipment applications from other manufacturers. We note, moreover, that the *Maritel Waiver Order* specifies the conditions that must be met for the certification of equipment designed to operate on 12.5 kHz offset channels in the VPC frequency band. Finally, international standards may serve as a guide to manufacturers.

²⁵¹ 47 C.F.R. § 80.211.

²⁵² *Id.* § 80.211(f).

²⁵³ *Id.* § 80.371(c).

²⁵⁴ Maritel Comments (PR 92-257) at 6.

²⁵⁵ *Id.*

²⁵⁶ Maritel Comments (PR 92-257) at 7; Maritel Reply Comments (PR 92-257) at 2-3. In its Reply Comments, Maritel reiterates its recommendation that we amend Section 80.211(f) but does not mention its earlier proposal to list the offset frequencies in a Part 80 table and establish technical rules for them. Maritel Reply Comments (PR 92-257) at 2-3.

with section 80.371(c)(1)(iii) of our rules. Finally, and for the reasons stated in the 4th FNPRM, we will adopt the proposals to specify that VPC operations must have a frequency deviation that does not exceed +/- 5 kHz (rather than a frequency deviation of precisely +/- 5 kHz), and to require Canadian coordination of offset operations whenever operation on either adjoining 25 kHz channel would require such coordination.²⁵⁷

2. Use of Additional VHF Channels

62. *Background.* In the 4th FNPRM, the Commission requested comment on a Maritel proposal to reallocate nine channel pairs in the 156.0375-156.2375 MHz and 160.6375-160.8375 MHz bands²⁵⁸ to VPC stations.²⁵⁹ Three of the frequencies are allocated for Part 90 public safety use,²⁶⁰ three others are allocated to Part 90 Industrial/Business use,²⁶¹ and the remaining twelve frequencies are adjacent to channels allocated for public safety or Industrial/Business use. Maritel contended that a reallocation of the channels to Part 80 is warranted because there are currently fewer channels available for VPC operations in the United States than there are in other countries.²⁶² Maritel also stated that the reallocation would have minimal impact on public safety licensees because there currently is light demand for the frequencies, and the Commission has provided such licensees with additional spectrum in higher frequency bands.²⁶³ The Commission declined to adopt Maritel's recommended reallocation without first assessing the demand for this spectrum from Part 90 public safety eligibles, since VHF spectrum is popular for public safety communications due to its propagation characteristics.²⁶⁴ It also noted that the frequency band 746-806 MHz, cited by Maritel as one of the bands to which some public safety operations will eventually migrate, remains encumbered by broadcast television licensees, who do not have to vacate this band until the end of the digital television transition period, December 31, 2006 at the earliest.²⁶⁵ The Commission requested comment on Maritel's reallocation proposal, and asked whether public safety or maritime radio has a greater immediate need for the identified VHF spectrum.²⁶⁶

63. *Discussion.* Based on the present record, we are unable to conclude that there is little need for the identified frequencies by public safety entities, and we accordingly decline to reallocate the

²⁵⁷ The USCG and Maritel both support the proposal pertaining to frequency deviation, and the USCG supports the proposal pertaining to Canadian coordination, without further elaboration. USCG Comments (PR 92-257) at 2; Maritel Comments (PR 92-257) at 6; Maritel Reply Comments (PR 92-257) at 2.

²⁵⁸ The targeted frequency pairs are 156.0375 MHz / 160.6375 MHz, 156.0625 MHz / 160.6625 MHz, 156.0875 MHz / 160.6875 MHz, 156.1125 MHz / 160.7125 MHz, 156.1375 MHz / 160.7375 MHz, 156.1625 MHz / 160.7625 MHz, 156.1875 MHz / 160.7875 MHz, 156.2125 MHz / 160.8125 MHz, 156.2375 MHz / 160.8375 MHz.

²⁵⁹ VPC 4th FNPRM, 17 FCC Rcd at 233-35, ¶¶ 12-14.

²⁶⁰ These frequencies are: 156.0375 MHz, 156.1125 MHz, and 156.1875 MHz.

²⁶¹ These frequencies are: 160.6875 MHz, 160.7625 MHz, and 160.8375 MHz.

²⁶² See *id.* at 233-34, ¶ 12.

²⁶³ See *id.* at 234, ¶ 13 (*citing* Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communications Requirements Through the Year 2010, *First Report and Order and Third Notice of Proposed Rule Making*, WT Docket No. 96-86, 14 FCC Rcd 152 (1998) (*Public Safety First Report and Order*)). Maritel also requested that the Commission immediately freeze further licensing of this spectrum as a prelude to an auction of the spectrum for VPC applications. See *id.*

²⁶⁴ *Id.* As noted in the VPC 4th FNPRM, none of Maritel's proposed channel pairs can be reallocated without affecting public safety because the mobile transmit frequency of each is either directly allocated to public safety or is adjacent to a frequency that is allocated to public safety. *Id.* at 234 n.50.

²⁶⁵ *Id.* (*citing Public Safety First Report and Order*, 14 FCC Rcd at 159-161, ¶ 10).

²⁶⁶ *Id.* at 163, ¶ 14.

frequencies to maritime use. Maritel acknowledges the public interest imperative of ensuring that public safety entities have adequate spectrum, particularly in the wake of the terrorist events of September 11, 2001, but reiterates its view that the proposed reallocation will “not have a meaningful impact on public safety entities.”²⁶⁷ Maritel notes that the nine channel pairs represent a small fraction of the total spectrum available for public safety in the 470-512 MHz and 800 MHz bands, and an even smaller fraction if one takes into account the additional spectrum that is being made available for public safety use in the 700 MHz²⁶⁸ and 4.9 GHz²⁶⁹ bands.²⁷⁰ Maritel also states that, at present, public safety use of the channels is extremely light.²⁷¹ However, we have not been presented with any compelling information that causes us to change the Commission’s earlier determination to allocate the spectrum to public safety in the first place. Accordingly, we do not believe it is appropriate to reallocate public safety spectrum to another use simply because the spectrum sought is a small percentage of the total spectrum allocated to public safety. This is especially so with respect to VHF spectrum, which has propagation characteristics that are highly valued by public safety entities.²⁷² Although Maritel places great weight on the fact that the spectrum is not heavily used by public safety entities at present, we believe it is premature to conclude that there is little public safety demand for these channels. As APCO notes, these are narrowband channels that were made available for licensing in the Commission’s *Refarming Proceeding*,²⁷³ and the adjacent channels are still used for wideband operations. These adjacent channel wideband operations deter or preclude use of the narrowband channels because of the threat of harmful interference they pose.²⁷⁴ After these adjacent channel operations migrate to narrowband equipment, the channels identified by Maritel may be more utilized by public safety agencies.²⁷⁵ We therefore conclude that Maritel has not clearly established that the proposed reallocation will have no adverse effect on public safety operations, and we accordingly decline to adopt its proposal. Notwithstanding our disposition of this issue, we are aware that maritime safety would benefit by the allocation of additional spectrum for Part 80 operations. The USCG observes that additional spectrum to accommodate existing and new maritime communications technologies generally must be allocated from the 156-162 MHz band in order to comport with international allocations, and contends that there is an existing shortage of VHF

²⁶⁷ Maritel Comments (PR 92-257) at 7.

²⁶⁸ See, e.g., Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communications Requirements Through the Year 2010, *Fourth Report and Order and Fifth Notice of Proposed Rule Making*, WT Docket No. 96-86, 16 FCC Rcd 2020 (2001).

²⁶⁹ See The 4.9 GHz Band Transferred from Federal Government Use, *Second Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 00-32, 17 FCC Rcd 3955 (2002).

²⁷⁰ Maritel Comments (PR 92-257) at 7-8.

²⁷¹ *Id.* at 9. Maritel also notes that many of the targeted channels are used for industrial and business purposes, and asserts that, in most cases, the frequency assignments that would be used for maritime purposes would not be on the same channel centers as those used by public safety entities, and that in those cases where mobile transit frequencies are operating on or adjacent to the identified frequencies, “modest frequency planning will ensure that no harmful co-channel interference ensues.” *Id.* at 10.

²⁷² *VPC 4th FNPRM*, 17 FCC Rcd at 230, ¶ 4; see also APCO Reply Comments at 2-3.

²⁷³ See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, *Second Report and Order*, PR Docket No. 92-235, 12 FCC Rcd 14307 (1997).

²⁷⁴ APCO Reply Comments at 2.

²⁷⁵ See *id.* The Commission recently amended the Part 90 rules to establish specific timetables for migration of private land mobile radio operations to narrowband technology. See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, *Second Report and Order and Second Further Notice of Proposed Rule Making*, WT Docket No. 99-87, 18 FCC Rcd 3034 (2003).

maritime channels that will only become worse with the deployment of new technologies.²⁷⁶ We intend to continue to work with the USCG and the maritime community to address issues of spectrum scarcity.

3. Automatic Identification Systems

64. *Background.* Automatic Identification Systems (AIS) employ self-organizing time division multiple access techniques to provide a VHF maritime ship-to-ship/ship-to-shore maritime radio service in which vessels and designated shore stations broadcast a unique identifier, coupled with safety-related information on, for example, ship positions and intentions. AIS-transmitted information can be received by similarly equipped vessels and shore stations in order to improve collision avoidance and facilitate vessel tracking.²⁷⁷ Section 80.371(c)(3) of the Commission's rules requires that each licensee of VHF Public Coast Service Areas 1-9 enter into an agreement with the Coast Guard to specify two channel pairs offset 12.5 kHz from the VHF band public correspondence channels, that will be used by the Coast Guard for AIS and related systems in support of PAWSS,²⁷⁸ which will provide Vessel Traffic Services to facilitate the safe and efficient transit of vessel traffic.²⁷⁹ On March 7, 2001, Maritel and the Coast Guard agreed that Channels 87A/87B (157.375 MHz/161.975 MHz) would be so designated for PAWSS in VHF Public Coast Service Areas 1-9.²⁸⁰ In 2003, however, Maritel terminated its agreement with the Coast Guard.²⁸¹ Following the termination, Maritel filed an Emergency Petition for Declaratory Ruling requesting that the Commission clarify that shipborne AIS transmitters may not operate on Channels 87B and 88B or any other channel designated for VPC stations,²⁸² and the National Telecommunications and Information Administration (NTIA) filed a Petition for Rulemaking urging the Commission to work with NTIA to allocate Channels 87B and 88B for AIS use exclusively.²⁸³ These two petitions remain pending before the Wireless Telecommunications Bureau, which issued a consolidated Public Notice requesting comment on both petitions.²⁸⁴

65. In the *4th FNPRM*, which was released before the agreement between the Coast Guard and Maritel was terminated and the Maritel and NTIA petitions were filed, the Commission requested comment on a proposal by Maritel that we amend section 80.371(c)(3) in order to provide VPC licensees and the Coast Guard with the option of specifying "non-offset" channel pairs (*i.e.*, the VPC frequency

²⁷⁶ USCG Comments (PR 92-257) at 2; *accord* Maritel Reply Comments (PR 92-257) at 1-2.

²⁷⁷ See *GMDSS R&O* at 6765 ¶ 56; *VPC 4th FNPRM*, 17 FCC Rcd at 235 n.51.

²⁷⁸ See note 27, *supra*.

²⁷⁹ 47 C.F.R. § 80.371(c)(3); see *VPC Third Report and Order*, 13 FCC Rcd at 19875, ¶ 46.

²⁸⁰ See Memorandum of Agreement Between United States Coast Guard and the Maritime VHF Public Coast Area Licensee at 2 (dated Mar. 7, 2001) (*USCG-Maritel MOA*). See also Wireless Telecommunications Bureau Announces the Selection of Two VHF Channel Pairs for the United States Coast Guard's Ports and Waterways Safety System, *Public Notice*, 16 FCC Rcd 7968 (2001) (*AIS Channel Selection PN*).

²⁸¹ See Wireless Telecommunications Bureau Seeks Comment on Maritel, Inc. Petition for Declaratory Ruling and National Telecommunications and Information Administration Petition for Rulemaking Regarding the Use of Maritime VHF Channels 87B and 88B, *Public Notice*, 18 FCC Rcd 23260 (WTB 2003).

²⁸² MariTel, Inc., Emergency Petition for Declaratory Ruling (filed Oct. 15, 2003).

²⁸³ Letter, dated Oct. 24, from Frederick R. Wentland, Associate Administrator, Office of Spectrum Management, NTIA, to John B. Muleta, Chief, Wireless Telecommunications Bureau, FCC (RM-10821).

²⁸⁴ See Wireless Telecommunications Bureau Seeks Comment on Maritel, Inc. Petition for Declaratory Ruling and National Telecommunications and Information Administration Petition for Rulemaking Regarding the Use of Maritime VHF Channels 87B and 88B, *Public Notice*, 18 FCC Rcd 23260 (WTB 2003). The Bureau has also requested comment on a related proposal by Maritel to serve as exclusive AIS frequency coordinator. See Wireless Telecommunications Bureau Seeks Comment on MariTEL, Inc. Proposal to Serve as Automatic Identification System (AIS) Frequency Coordinator, *Public Notice*, 18 FCC Rcd 24057 (WTB 2003).

pairs set forth in section 80.371(c)(1)(i)) for PAWSS.²⁸⁵ Noting that its intent in authorizing the use of offset channels for this purpose was to maximize the parties' flexibility, the Commission agreed with Maritel that the parties should be able to specify non-offset channel pairs if mutually agreeable.²⁸⁶ In addition, the Commission invited comment on a USCG request that rules be adopted to ensure that properly certified AIS equipment tested by an independent test facility is available to meet IMO and Coast Guard vessel carriage regulations.²⁸⁷

66. *Discussion.* In their comments to the 4th FNPRM, both the USCG and Maritel support the proposed amendment of section 80.371(c)(3) to remove the limitation on the types of channels that may be designated for PAWSS support.²⁸⁸ However, in light of the intervening developments – the termination of the MOA, the emerging dispute between Maritel and the NTIA/USCG with respect to providing spectrum for AIS, and the conflicting petitions filed by Maritel and the NTIA – we believe we should maintain section 80.371(c)(3) without change until we can address the larger issues that have been raised in the pending Maritel and NTIA petitions. The issues pertaining to the use of VPC and other spectrum for AIS will be reviewed more broadly in the context of the aforementioned Maritel and NTIA petitions, and we emphasize that nothing we do here is intended to prejudge or otherwise influence the resolution of those larger issues.

67. We do not believe, however, that domestic deployment of AIS needs to come to a standstill until final determinations are made regarding all of the issues raised in the pending Maritel and NTIA petitions. Accordingly, we will adopt rules for the certification of AIS equipment, as recommended by the USCG. The USCG again observes that SOLAS requires the installation of AIS on ships.²⁸⁹ We note that the phase-in schedule for deployment of AIS began on July 1, 2002, and the IMO accelerated the schedule to require full implementation, *i.e.*, installation on all ships subject to SOLAS on international voyages, by December 31, 2004, and for ships not engaged on international voyages, by July 1, 2008.²⁹⁰ The USCG further notes that AIS represents a significant enhancement of maritime safety and that its use could be expanded in service of Homeland Security initiatives. Further evincing the critical importance of AIS implementation, in November 2002, following the close of the pleading cycle in this proceeding, the U.S. Congress adopted the Maritime Transportation Security Act of 2002, which includes a statutory mandate for domestic deployment of AIS within a prescribed period of time.²⁹¹ In addition, no commenter in this proceeding has opposed this proposal.²⁹² Therefore, we will require applications for certification of AIS equipment to meet applicable international standards.²⁹³ In addition, as we have done with 406-406.1 MHz EPIRBs, and as requested by the USCG,²⁹⁴ we will require applicants for

²⁸⁵ VPC 4th FNPRM, 17 FCC Rcd at 235, ¶ 16.

²⁸⁶ *Id.*

²⁸⁷ *Id.*

²⁸⁸ USCG Comments (PR 92-257) at 3; Maritel Comments (PR 92-257) at 11.

²⁸⁹ USCG Comments (PR 92-257) at 3.

²⁹⁰ See Amendments to the International Convention for the Safety of Life at Sea, 1974, as amended, Chapter V, Regulation 19, "Carriage requirements for shipborne navigational systems and equipment," December 2002.

²⁹¹ See 46 U.S.C. § 70114; P.L. 107-295, § 102(e), 116 Stat. 2084 (Nov. 25, 2002).

²⁹² We note, however, that in light of the termination of the *USCG-Maritel MOA*, Maritel has requested that the Commission withdraw authorization of shipborne AIS equipment. See Letter dated July 30, 2003 from Russell H. Fox, counsel for Maritel, to D'wana R. Terry, Chief, Public Safety and Private Wireless Division. Like the related AIS issues raised by Maritel outside this docket, that request will be addressed in a separate proceeding.

²⁹³ Applications for AIS equipment certification must meet the following standards: ITU-R M.1371-1, IMO Resolution MSC.74(69), IEC 61162-1, IEC 61162-100, and IEC 61993-2.

²⁹⁴ USCG Comments (PR 92-257) at 3.

certification to submit the applicable test data and obtain a letter from the Coast Guard stating whether the device satisfies the applicable international requirements we incorporate by reference in this *Sixth Report and Order*.

C. Technical and Operational Matters

1. Emission Masks and Designators for Data Services

68. *Background.* The Commission proposed in the 4th FNPRM to expand the data emissions permitted in the Maritime Radio Services to accommodate the full range of possible data services.²⁹⁵ At Maritel's urging, it specifically proposed the adoption of a new emission mask modeled on the Part 90 emission mask,²⁹⁶ and invited comment on this proposal.²⁹⁷

69. *Discussion.* We will generally adopt the proposed emission mask for Part 80, and permit the use of any emission mode so long as the applicable mask limits are satisfied. Both the USCG and Maritel support this proposal. The USCG asserts that emission masks are necessary for operation on 12.5 kHz channels.²⁹⁸ We agree with Maritel that this proposal will allow VPC licensees to provide a full range of data services and will accommodate VPC licensees interested in providing land mobile radio services.²⁹⁹ With one exception, discussed below, we will apply the emission mask contained in section 90.210 of the Commission's rules,³⁰⁰ since our experience with that emission mask indicates that it strikes an appropriate balance between preventing harmful interference, on the one hand, and providing licensees with significant technical flexibility, on the other.

70. We will not require devices certified for AIS operation to conform to the Part 90 emission mask. AIS devices have the ability to operate on 25 kHz or 12.5 kHz channels. An internationally approved standard for AIS, IEC 61993-2, was published by the IEC in December 2001, at roughly the same time the 4th FNPRM was released. In its current form, the emission mask in IEC 61993-2 is not as stringent as the one in section 90.210 of the Commission's rules. Due to the importance of AIS as a navigational and safety tool, and the international acceptance of IEC 61993-2 as an appropriate AIS technical standard, we do not believe it would serve the public interest to require AIS devices to comply with the section 90.210 emission mask

²⁹⁵ VPC 4th FNPRM, 17 FCC Rcd at 236, ¶ 19.

²⁹⁶ See 47 C.F.R. §§ 90.207, 90.210. The emission mask is the technical specification that limits the distribution of power of a radio transmitter as a function of frequency. The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, *First Report and Order and Third Notice of Proposed Rulemaking*, WT Docket No. 96-86, 14 FCC Rcd 152, 213 n.337 (1998). The emission mask is an important technical parameter that affects the efficient use of a frequency band by limiting emissions from one channel into adjacent channels. See 1998 Biennial Regulatory Review – 47 C.F.R. Part 90 – Private Land Mobile Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 98-182, 15 FCC Rcd 16673, 16689, ¶ 33 (2000).

²⁹⁷ VPC 4th FNPRM, 17 FCC Rcd at 236, ¶ 19.

²⁹⁸ USCG Comments (PR 92-257) at 4.

²⁹⁹ Maritel Comments (PR 92-257) at 11-12. See also Maritel Reply Comments (PR 92-257) at 3.

³⁰⁰ 47 C.F.R. § 90.210

2. Station Identification

71. *Background.* Currently, all VPC stations must provide station identification³⁰¹ at the beginning and end of each radiotelephone communication with any other station, and once every fifteen minutes in between.³⁰² In the 4th FNPRM, the Commission solicited comment on a request by Maritel to eliminate the station identification requirement for geographic area VPC licensees.³⁰³ Noting that the Commission had previously eliminated or relaxed station identification requirements for other categories of CMRS providers in instances where there is a single licensee operating on a particular channel in a Commission-defined service area, Maritel argued that VPC licensees should receive similar treatment.³⁰⁴ Maritel further argued that the Commission or other competent authority will always be able to assume that the use of a particular VPC channel will be by the geographic area licensee unless a site-specific licensee identifies itself, and that in the case of any coast station that utilizes DSC, the unique coast station identification will be transmitted automatically.³⁰⁵ Finally, Maritel noted that the Commission had decided to forbear from enforcing the station identification requirements for the Automated Maritime Telecommunications System (AMTS) service, another Part 80 service.³⁰⁶ The Commission sought comment on Maritel's request, and in particular asked for comment on whether there is any basis to distinguish geographic area VPC stations from AMTS stations and other CMRS providers for purposes of the station identification requirement.³⁰⁷

72. *Discussion.* We will eliminate the station identification requirement for geographic area VPC stations because we see little justification for requiring station identification of such stations when we do not require station identification of similarly situated CMRS providers, including AMTS stations. Maritel, the only commenter addressing this issue, repeats its arguments that station identification requirements are unnecessary for geographic area VPC stations because the identification data is readily obtainable from the public record, and that there is no basis to treat geographic area VPC stations differently from AMTS stations and those CMRS providers that have been relieved of the station identification requirement.³⁰⁸ Although we believe the case for relieving geographic area VPC licensees of station identification requirements is not quite as strong as the case for relieving AMTS stations of such requirements, inasmuch as a consumer will *always* know which AMTS provider he or she is utilizing because of his or her contractual relationship with that provider,³⁰⁹ we believe we can eliminate the station identification requirement for geographic area VPC stations for largely the same reasons as warranted elimination of the requirement for AMTS. Elimination of this requirement will not compromise the ability of the Commission or the USCG to identify transmissions from geographic area VPC stations, and should not engender confusion among the licensees' customers. Further, we do not

³⁰¹ Identification generally is by call sign, but a VPC station may identify by either the approximate geographic location of the station or the area it serves when it is the only VPC station serving the location or there will be no conflict with the identification of any other station. 47 C.F.R. § 80.102(a), (e).

³⁰² 47 C.F.R. § 80.102(a). When public correspondence is exchanged with a ship or aircraft station, the intermediate identification may be deferred until the completion of the communications. *Id.*

³⁰³ VPC 4th FNPRM, 17 FCC Rcd at 237, ¶ 20.

³⁰⁴ See *id.*; see also Implementation of Sections 3(n) and 332 of the Communications Act, *Memorandum Opinion and Order on Reconsideration*, GN Docket No. 92-252, 15 FCC Rcd 6341, 6346-47, ¶¶ 13-14 (2000).

³⁰⁵ VPC 4th FNPRM, 17 FCC Rcd at 237, ¶ 20.

³⁰⁶ *Id.* (citing Regionet Wireless License, LLC, *Order*, 15 FCC Rcd 16119 (2000) (*Regionet Order*)).

³⁰⁷ *Id.*

³⁰⁸ Maritel Comments (PR 92-257) at 12-13.

³⁰⁹ See *Regionet Order*, 15 FCC Rcd at 16121, ¶ 6.

believe that elimination of this requirement would otherwise have an adverse effect on maritime safety.³¹⁰ Accordingly, in keeping with the Commission's goal of eliminating requirements that no longer have a public interest basis, we will amend section 80.102(a) to relieve geographic area VPC stations of the need to provide station identification. Site-based VPC stations remain subject to the station identification requirement.

D. Miscellaneous Issues

1. Station Documents

73. *Background.* The Commission proposed in the 4th FNPRM to allow VPC licensees to maintain required station documents and records in electronic form.³¹¹ It noted that the purpose of the station log requirements is to maintain a steady record of equipment performance and the details of distress communications,³¹² and agreed with Maritel that electronic record keeping may offer conveniences for both the VPC licensee and the Commission, while also improving the accuracy of the station's logs.³¹³ The Commission tentatively concluded that adoption of this proposal would facilitate access to the records by Commission staff, but requested comment as to whether it would present any problems for other federal agencies that sometimes inspect station logs, such as the Coast Guard and the NTSB.³¹⁴ The Commission also sought comment on whether any other entities, including state and local public safety organizations, rely on these records and, if so, whether these entities would find electronic records adequate.³¹⁵

74. The Commission also proposed to relax the requirement in section 80.405(c) of its rules³¹⁶ that licensees post a current station authorization or a copy at the principal control point of each station.³¹⁷ Noting that Maritel had complained that this posting requirement is burdensome in its case because it has nine geographic area licenses, each of which can cover hundreds of transmitter sites, the Commission tentatively agreed with Maritel that it may be appropriate to limit the posting requirement for VPC licensees to a document identifying the licensee, where the license is maintained, and a telephone number of a representative of the licensee who may be contacted to answer any questions regarding the operation of the particular transmitter.³¹⁸

75. *Discussion.* We agree with Maritel and the USCG that we should permit VPC licensees to maintain station records in electronic form.³¹⁹ We believe that electronic record keeping will eliminate an unnecessary paperwork burden on VPC licensees, facilitate access to what is often essential data by the

³¹⁰ We note that the USCG has not indicated any opposition to elimination of the station identification requirement.

³¹¹ VPC 4th FNPRM, 17 FCC Rcd at 238, ¶ 22.

³¹² *Id.*; see 47 C.F.R. § 80.409(c)(3), (7).

³¹³ VPC 4th FNPRM, 17 FCC Rcd at 238, ¶ 22.

³¹⁴ *Id.*

³¹⁵ *Id.*

³¹⁶ 47 C.F.R. § 80.405(c).

³¹⁷ VPC 4th FNPRM, 17 FCC Rcd at 239, ¶ 23.

³¹⁸ *Id.*

³¹⁹ Maritel Comments (PR 92-257) at 13; Maritel Reply Comments (PR 92-257) at 3-4; USCG Comments (PR 92-257) at 5.

Commission, the USCG, and the NTSB,³²⁰ and minimize the risk of inadvertent data entry, particularly through the automatic logging capability of DSC-compatible systems. We note, moreover, that this action is consistent with our recent decision to allow automatic logging in the Aviation Radio Service.³²¹

76. We will also relax the posting requirement for VPC stations. The purpose of the posting requirement is to provide a means for authorized representatives of the Coast Guard, the Commission, and foreign administrations to ensure that the station is using only authorized equipment.³²² Modifying this requirement for VPC licensees, as urged by Maritel,³²³ will reduce the regulatory burden on VPC licensees without compromising the ability of government authorities to obtain the essential information underlying the posting requirement – identification and location of the license, and telephone number to contact the licensee’s representative – at each station. In addition, this relaxation of the posting requirement is consistent with the posting requirements for cellular radio service and private land mobile radio licensees.³²⁴

2. Filing Documents

77. *Background.* We classify all public coast stations as CMRS providers.³²⁵ Pursuant to section 10 of the Communications Act of 1934, as amended (Act),³²⁶ the Commission has determined to forbear from enforcing the tariff filing obligations of section 203 of the Act³²⁷ with respect to most domestic CMRS providers because the CMRS market is competitive.³²⁸ The Commission has also exercised its authority under section 10 to forbear from enforcing section 214 of the Act³²⁹ against CMRS providers insofar as it requires them to file an application and secure the Commission’s advance approval before any discontinuance of service.³³⁰ In the 4th FNPRM, the Commission tentatively rejected a Maritel request to amend the Part 80 rules to clearly apply these forbearance decisions to VPC licensees.³³¹ Specifically, it tentatively declined to adopt Maritel’s recommendation that the Commission remove both the requirement in section 80.95(a)(1) of the Commission’s rules that VPC stations charge only tariffed

³²⁰ Maritel represents that it has the capability to extend access to its electronic records, via its web site, to the Commission, the Coast Guard, and the NTSB, to facilitate speedy resolution of accident investigations. Maritel Comments (PR 92-257) at 13.

³²¹ See 47 C.F.R. § 87.109; see also Review of Part 87 of the Commission’s Rules Concerning the Aviation Radio Service, *Report and Order*, WT Docket No. 01-289, 18 FCC Rcd 21432 (2003).

³²² *VPC Second R&O*, 12 FCC Rcd at 16979, ¶ 57.

³²³ Maritel Comments (PR 92-257) at 13.

³²⁴ See 47 C.F.R. §§ 22.303, 90.437.

³²⁵ See Implementation of Sections 3(n) and 332 of the Communications Act – Regulatory Treatment of Mobile Services, *Second Report and Order*, GN Docket No. 93-252, 9 FCC Rcd 1411, 1448, ¶ 83 (1994) (*CMRS 2nd R&O*), *recon. dismissed in part and denied in part*, 15 FCC Rcd 5231 (2000); see also 47 C.F.R. §§ 20.9(a)(5), 80.3(f). Although all public coast stations are presumed to be CMRS providers, VPC geographic area licensees and applicants may seek authority to operate as private land mobile radio service providers if they make a showing sufficient to overcome the CMRS presumption. See 47 C.F.R. § 20.9(b).

³²⁶ 47 U.S.C. § 160.

³²⁷ *Id.* § 203.

³²⁸ *CMRS 2nd R&O*, 9 FCC Rcd at 1478-79, ¶¶ 174-175.

³²⁹ 47 U.S.C. § 214.

³³⁰ *CMRS 2nd R&O*, 9 FCC Rcd at 1480-81, ¶ 182.

³³¹ *VPC 4th FNPRM*, 17 FCC Rcd at 240, ¶ 26.

rates,³³² and the requirement in section 80.471 of our rules that a public coast station not discontinue or impair service unless authorized to do so by the Commission.³³³ The Commission reasoned that it generally does not revise its service rules to eliminate requirements from which it is forbearing.³³⁴ The Commission further noted that “what Maritel recommends is already in effect,” in that we no longer require VPC stations, by virtue of their classification as domestic CMRS providers,³³⁵ to file tariffs or submit applications for discontinuance of service.³³⁶ The Commission added that the Part 80 rules regarding discontinuance of service must remain in effect because the Commission has not extended forbearance from the discontinuance-of-service requirements to international CMRS providers, such as high seas public coast stations, but only to domestic CMRS providers.³³⁷ Therefore, in lieu of proposing to adopt Maritel’s recommendations to remove these regulatory provisions, the Commission proposed to simply add to sections 80.95 and 80.471 a cross-reference to the CMRS forbearance rule, section 20.15(b).³³⁸

78. *Discussion.* We will add to sections 80.95 and 80.471 of the Commission’s rules a cross-reference to the forbearance rule. This revision will provide VPC licensees with additional notice that they are no longer subject to the tariff filing requirement or the discontinuance-of-service requirement. We decline to remove the subject rules for the reasons stated in the 4th FNPRM. We note that Maritel now supports the approach the Commission is adopting.³³⁹

V. GMDSS SECOND FURTHER NOTICE OF PROPOSED RULE MAKING

A. Digital Selective Calling Equipment

79. Section 80.225(a) of the Commission’s rules specifies that DSC equipment voluntarily installed in coast or ship stations must meet either the requirements of ITU-R Recommendation M.493-10 (including only equipment classes A, B, D and E) or RTCM Paper 56-95/SC101-STD.³⁴⁰ Recommendation ITU-R M.493-11 was approved by ITU-R Working Party 8B and by Study Group 8 in December 2003. In addition, IEC 62238, describing certification requirements for a Class D (VHF) DSC radio, was adopted and published in March 2003. The USCG in its comments requested that once Recommendation ITU-R M.493-11 and IEC 62238 are adopted, all DSC equipment should meet Recommendation ITU-R M.493-11 and Class D DSC equipment should meet IEC 62238, in place of RTCM Paper 56-95/SC101-STD.³⁴¹ We note that the RTCM standard has not been updated and does contain some discrepancies and contradictions with the ITU standard, such as its requirement that MF/HF DSC radios include provisions for routine all-ships calling. Should reference to the RTCM standard be deleted in favor of the new Recommendation ITU-R M.493-11? IEC Standard 62238 includes a functional requirement possibly requiring dual receivers, to ensure a DSC call can be received while voice

³³² 47 C.F.R. § 80.95(a)(1).

³³³ 47 C.F.R. § 80.471.

³³⁴ VPC 4th FNPRM, 17 FCC Rcd at 240, ¶ 26.

³³⁵ See 47 C.F.R. § 80.3(f).

³³⁶ VPC 4th FNPRM, 17 FCC Rcd at 240, ¶ 26 (citing 47 C.F.R. § 20.15(b)(3), (c)).

³³⁷ See CMRS 2nd R&O, 9 FCC Rcd at 1464, ¶ 126 & n.261 (indicating that the Commission had not proposed forbearance for international CMRS), 1481 n.369 (declining a request that it propose forbearance for international CMRS).

³³⁸ *Id.*

³³⁹ Maritel Comments (PR 92-257) at 14.

³⁴⁰ 47 C.F.R. § 80.225(a).

³⁴¹ See USCG Comments dated 08/14/02 at 5.

traffic is being received on another channel. Should IEC 62238 be included in the requirement of Section 80.225(a) for Class D radios in place of or in addition to the RTCM standard, or would this IEC 62238 standard make it prohibitively expensive to comply with the rule? Can the IEC 62238 standard be met using methods not requiring dual receivers? We request comment on these questions.

B. INMARSAT Ship Earth Stations

80. Section 80.905 of the Commission's Rules permits ships operating more than 100 nautical miles from shore to carry certain INMARSAT ship earth stations in lieu of an SSB radio.³⁴² In the *GMDSS Second Report and Order*, we have revised section 80.905 to limit the ship earth stations authorized by that section to INMARSAT A (existing units only), B, C or M.³⁴³ After the *GMDSS FNPRM* was issued, the IMO accepted the INMARSAT F-77 ship earth station as meeting GMDSS requirements, and the IEC published certification standard 61097-3 covering the INMARSAT F-77. We ask interested parties to consider whether section 80.905 should be further amended to include the INMARSAT F-77 in the list of ship earth stations that are permitted to be used in lieu of an SSB radio. Should any mobile satellite equipment meeting the IMO GMDSS requirements and the IEC certification requirements be included? Should any mobile satellite system meeting the Commission's requirements for enhanced 911 (E911) emergency calling and relevant IEC certification requirements be included?

C. Reserve Power Requirements for Small Passenger Vessels

81. Section 80.917 of the Commission's rules requires vessels of more than 100 gross tons to have a reserve power supply meeting certain minimum standards.³⁴⁴ The NTSB has recommended that we amend section 80.917 to extend the reserve power requirement to small passenger vessels of 100 gross tons or less.³⁴⁵ The NTSB states that imposing the reserve power supply requirement on all small passenger vessels will prevent accidents and save lives.³⁴⁶ The impetus for this recommendation is the NTSB's investigation of a November 17, 2000 fire on board the small passenger vessel *Port Imperial Manhattan* in the Hudson River.³⁴⁷ The fire broke out when the *Port Imperial Manhattan* was carrying eleven persons on an evening commuter run from Manhattan to Weehawken, New Jersey. The vessel's radio became inoperative when the fire burned through the electrical cables to the pilothouse.³⁴⁸ The *Port Imperial Manhattan* was not outfitted with an emergency backup source of power, and was not required to have such reserve power under the Commission's rules because it weighed less than 100 gross tons.³⁴⁹ Although passengers and crew were ultimately rescued without loss of life, and the burning vessel was towed to shore where the fire was extinguished by the New York Fire Department, the NTSB concluded that the vessel's inability to contact search and rescue personnel through VHF radiotelephone

³⁴² 47 C.F.R. § 80.905.

³⁴³ See ¶ 38, *supra*.

³⁴⁴ 47 C.F.R. § 80.917. Section 80.917 by its terms does not apply to any vessel the keel of which was laid on or before March 1, 1957. See *id.* § 80.917(a).

³⁴⁵ Letter, dated July 3, 2002, from Marion C. Blakey, Chairman, NTSB, to Michael K. Powell, Chairman, FCC (*NTSB Recommendation*). The *NTSB Recommendation* and the Commission's response to the NTSB, Letter, dated October 23, 2002, from D'wana R. Terry, Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, to Marion C. Blakey, Chairman, NTSB, have been made part of this docket, and can be accessed through the Commission's Electronic Comment Filing System.

³⁴⁶ *Id.* at 1.

³⁴⁷ *Id.*

³⁴⁸ *Id.* at 2.

³⁴⁹ *Id.*

communication unnecessarily increased the risk to passengers and crew.³⁵⁰ The NTSB notes that if the *Port Imperial Manhattan* had been equipped with a backup source of power, and thereby retained its communications capability, crewmembers would have been able to inform emergency response vessels of the seriousness of the situation and help coordinate the rescue operation.³⁵¹ The NTSB therefore recommends (as NTSB Recommendation M-02-17) that the Commission amend its rules to “[r]equire that small passenger vessels have VHF radiotelephone communications systems on board that can operate even when the vessel loses power.”³⁵²

82. Accordingly, we now request comment on whether we should require that all small passenger vessels have VHF radiotelephone communications systems on board that can operate even when the vessel loses power. Proponents of such a requirement should indicate whether it is best accomplished through simply removing the tonnage limitation in section 80.917, or whether additional or alternative rule changes are required. We ask commenters to provide information on the costs to small vessel operators of complying with such a requirement, and whether the safety benefits to be derived therefrom outweigh the compliance costs. Commenters are also invited to recommend other means of addressing the safety needs of small vessel operators, crewmembers, and passengers, either as alternatives to the *NTSB Recommendation* or as supplementary measures.

D. Commercial Operator License Issues

83. Richard H. Weil (Weil) filed a petition for rulemaking on November 22, 1999, seeking an amendment of section 13.15(b) of the Commission’s rules³⁵³ to extend the license terms of GMDSS Radio Operator Licenses, GMDSS Radio Maintainer Licenses, GMDSS Operator/Maintainer Licenses, and Marine Radio Operator Permits.³⁵⁴ Weil says that the terms of these authorizations should be extended to the lifetime of the holder.³⁵⁵ He argues that it is arbitrary to provide five-year terms for these authorizations when General Radiotelephone Operator Licenses, Restricted Radiotelephone Operator Permits, and Restricted Radiotelephone Operator Permits-Limited Use have lifetime terms.³⁵⁶ Weil further contends that no safety purpose is served by the renewal requirement, and that the requirement imposes a needless paperwork burden on the affected licensees and permittees.³⁵⁷ We invite comment on Weil’s proposal to provide a lifetime term for GMDSS Radio Operator’s Licenses, GMDSS Radio Maintainer’s Licenses, GMDSS Operator/Maintainer Licenses, and Marine Radio Operator Permits, and ask interested parties to consider whether such an extension of the license term, if adopted, should apply to existing licenses as well as new licenses.³⁵⁸

³⁵⁰ *Id.*

³⁵¹ *Id.*

³⁵² *Id.* at 3.

³⁵³ 47 C.F.R. § 13.15(b).

³⁵⁴ Richard H. Weil Petition for Rulemaking, RM-10647, filed Nov. 22, 1999 (*Weil Petition*). The Petition for Rulemaking was placed on public notice on February 14, 2003. Consumer & Governmental Affairs Bureau Reference Information Center – Petition for Rulemaking Filed, *Public Notice*, Report No. 2595 (rel. Feb. 14, 2003).

³⁵⁵ *Weil Petition* at 1.

³⁵⁶ *Id.* Mr. Weil notes that, under our current rules, a person upgrading from a Marine Radio Operator Permit to a General Radiotelephone Operator License does not have to file periodic renewal applications as a consequence of the upgrade, but if that person upgrades again, to a GMDSS Radio Maintainer’s License, he or she must once again satisfy the renewal requirement. *Id.*

³⁵⁷ *Id.*

³⁵⁸ Mr. Weil proposes that the extended license term apply not only to licenses and permits issued after the proposed new rule would take effect, but also to licenses and permits issued prior to the effective date. *Id.*

84. As noted earlier,³⁵⁹ in 2001 PSPWD granted a waiver of section 13.203(a)(5) of the Commission's rules³⁶⁰ to permit Commercial Operator License Examination Managers (COLEMs) to use 100-question examinations for Element 7.³⁶¹ Earlier that year, PSPWD granted COLEMs a waiver of section 13.215 of the Commission's rules³⁶² to provide them with a six-month transition period before they were required to use the new question pool for Element 7.³⁶³ The waiver was needed because section 13.215 provides that COLEMs must use only the most recent question pool made available to the public in selecting questions for an examination.³⁶⁴ We can envision other situations in which it might be beneficial to provide a reasonable transition period before use of a new question pool becomes mandatory. Accordingly, we seek comment on whether we should amend section 13.215 by removing the requirement that COLEMs use only the most recent question pool. If we so amend the rule, we anticipate that the Bureau would announce a transition period for phasing in the use of any new question pool in the same public notice in which it announces the establishment and availability of that question pool. Finally, as a further measure to enhance flexibility in the commercial radio operator license examination process, and to obviate the need for waivers in the future, it may be beneficial to revise section 13.203(a) of the Commission's rules³⁶⁵ by deleting the specification of the number of questions for each examination element. If we do not codify the number of questions for each examination element, the Bureau could specify the number of questions for a given examination element in a public notice.³⁶⁶ We request comment on this approach.

E. Ship Security Alert System

85. On May 29, 2003, the IMO adopted Resolution MSC.147(77), Adoption of the Revised Performance Standards for a Ship Security Alert System, to provide a means for certain ships³⁶⁷ to transmit a covert security alert to shore to indicate that the security of the ship is under threat or has been compromised. The Resolution was incorporated into SOLAS Chapter XI-2, Regulation 6 and goes into effect on July 1, 2004. The Resolution recommended only functional requirements for the Ship Security Alert System (SSAS). For example, the system should have two activation points known only to the user, the system shall operate on a radio system that does not require adjustments such as tuning the radio and shall not cause an alarm to be raised on board, and the system shall include a unique identifier indicating that the alert has not been generated as a GMDSS alert. The Resolution did not recommend technical performance standards for the SSAS, but recommended that it may use existing radio installations that are compliant with chapter IV of the SOLAS Convention, other general communications radio systems or a

³⁵⁹ See ¶ 51 & note 202, *supra*.

³⁶⁰ 47 C.F.R. § 13.203(a)(5).

³⁶¹ *NRE Waiver Order*.

³⁶² 47 C.F.R. § 13.215.

³⁶³ Wireless Telecommunications Bureau Approves New Commercial Operator License Examination (COLE) Question Pool for Element 7 (Global Maritime Distress and Safety System (GMDSS) Radio Operating Procedures), *Public Notice*, 16 FCC Rcd 14466 (2001). It was the establishment of the new question pool, covering 100 key topics, that suggested the desirability of a 100-question test for Element 7.

³⁶⁴ 47 C.F.R. § 13.215.

³⁶⁵ *Id.* § 13.203(a).

³⁶⁶ We would assume that the number of questions for an examination element would typically be established in the same public notice announcing a new question pool for that element.

³⁶⁷ On new ships built after 1 July 2004; on all passenger ships not later than the first radio installation survey after 1 July 2004; on all tankers, gas carriers, bulk carriers, and cargo high speed ships over 500 gross tonnage, not later than the first radio installation survey after 1 July 2004; and on all other ships over 500 gross tonnage, not later than the first radio installation survey after 1 July 2006.

dedicated radio system. The equipment could include cellular phones in coastal areas and satellite services such as Inmarsat A, B, C, D, M, F-77 away from coastal areas, and possibly GMDSS VHF/MF/HF equipment in areas where there are coast stations for receiving addressed calls.³⁶⁸ The Coast Guard will assure that vessels' SSAS meets SOLAS requirements during its inspection of vessels. We seek comment to assist us in formulating the rules to guide the industry in making communications equipment to meet the needs of the SSAS. For example, what requirements should be imposed for SSAS equipment, certification, testing, registration, technical performance, message content and format, and routing of ship security alerts? What requirements are appropriate for communications service providers that route alerts from ship security equipment?

F. Updated References to International Standards

86. One of the key goals of this proceeding is to keep the Part 80 rules up to date with respect to changes in the international standards to which reference is made in Part 80.³⁶⁹ As noted, the Part 80 rules incorporate performance standards established by the IMO, the ITU, the IEC and other standards-setting organizations. We ask commenters to identify any such standards that have been revised or updated to a new version since the adoption of the *GMDSS R&O* on March 27, 2002, thus requiring a corresponding amendment of the Commission's rules. We specifically ask whether we should make the on-board frequencies listed in section 80.373(g) of the Commission's rules³⁷⁰ available for narrowband operations in light of the narrowbanding of these frequencies by the ITU.³⁷¹

G. 2002 Biennial Review

87. On November 8, 2002, Globe Wireless filed *ex parte* comments in the 2002 Biennial Regulatory Review proceeding proposing the elimination or revision of a number of part 80 rules.³⁷² On December 31, 2002, the Bureau issued a *2002 Biennial Regulatory Review Staff Report* providing recommendations as to whether specific rules should be retained, modified, or repealed.³⁷³ The *Staff Report* recommended that the Commission address the Globe Wireless Comments in the context of the instant proceeding.³⁷⁴ Accordingly, we hereby incorporate the Globe Wireless Comments into the record of this proceeding, and request comment on them.³⁷⁵

³⁶⁸ We understand that a number of providers already offer ship security alert systems. For example, Pole Star, Satamatic, and Transas each offer a unit that consists of an Inmarsat D transceiver with integrated GPS. Transas receives and manages the alerts in its security monitoring center, and takes action to notify and inform authorities. Another system, ShipLoc is operated by CLS, a subsidiary of the French Space Agency, and uses an Argos transmitter and GPS receiver which allows commercial ships to be tracked in near real-time and to inform authorities if there is a threat. COSPAS/SARSAT, a joint international satellite-based search and rescue system established by Canada, Russia, and the United States to locate emergency radio beacons transmitting on 121.5 MHz and 406 MHz, is also considering offering a service over the COSPAS/SARSAT system using the 406.0-406.1 MHz band.

³⁶⁹ See ¶ 6, *supra*.

³⁷⁰ 47 C.F.R. § 80.373(g).

³⁷¹ See *id.* § 2.106 n.5.287.

³⁷² Globe Wireless, Comments on: 476 [sic] CFR Chapter 1 – Possible Revision or Elimination of Rules (filed Nov. 8, 2002) (Globe Wireless Comments).

³⁷³ Federal Communications Commission 2002 Biennial Regulatory Review, *Staff Report of the Wireless Telecommunications Bureau*, WT Docket No. 02-310, 18 FCC Rcd 4243 (2002) (*Staff Report*).

³⁷⁴ *Id.*, 18 FCC Rcd at 4335.

³⁷⁵ Globe Wireless recommends, *inter alia*, that the Commission delete section 80.141(c)(1)-(2), 47 C.F.R. § 80.141(c)(1)-(2), as obsolete; delete section 80.203(b)(3), 47 C.F.R. § 80.203(b)(3), to accommodate (continued...)

88. In addition, we note that “housekeeping” changes to part 80 rules other than those identified by Globe Wireless also may be warranted. For example, note 5 to section 80.207(d) of the Commission’s Rules grandfathers certain transmitters manufactured prior to December 31, 1969.³⁷⁶ We doubt that any of these transmitters are still in use, and we seek comment on this question and on whether the note can be deleted. Also with respect to section 80.207(d) and section 80.313, we believe the entries in the tables for the frequency band 1605-27500 kHz³⁷⁷ should instead list 1615 kHz as the low end of the band, because the only maritime mobile operations permitted in the broadcast AM expanded band, 1605-1705 kHz, are those authorized pursuant to footnote US299 of the Table of Frequency Allocations, which does not encompass 1605-1615 kHz.³⁷⁸ We propose to correct this error. Further, we note that the section 80.207(d) table specifies emissions for radionavigation operations in the frequency band 14.00-14.05 GHz. We recently proposed in another proceeding to remove the radionavigation allocation in this band,³⁷⁹ and now we accordingly propose to remove the entry for 14.00-14.05 GHz in section 80.207(d). We invite comment on all of these proposals.

VI. REGULATORY MATTERS

A. Ex Parte Rules - Permit-But-Disclose Proceeding

89. This is a permit-but-disclose notice and comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission’s rules.³⁸⁰

B. Regulatory Flexibility Act

90. As required by the Regulatory Flexibility Act (RFA),³⁸¹ the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the rules adopted in the *Second Report and Order* in WT Docket No. 00-48. The FRFA for the *Second Report and Order* in WT Docket No. 00-48 is contained in Appendix C. The Commission’s Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the *Second Report and Order* in WT Docket No. 00-48, including the FRFA,

(...continued from previous page)

programming of authorized channels through the use of remote computers; revise the list of emission classes in section 80.207, 47 C.F.R. § 80.207; delete rules pertaining to Morse code, 47 C.F.R. §§ 80.355, 80.357; revise section 80.363, 47 C.F.R. § 80.363, to make additional spectrum available for ship station facsimile transmissions; and reassess the demand for private communications frequencies, 47 C.F.R. § 80.373. We note that some of Globe Wireless’s recommendations are addressed, or otherwise rendered moot, by actions already taken or proposed in this proceeding.

³⁷⁶ See 47 C.F.R. § 80.207(d), n.5.

³⁷⁷ Id., §§ 80.207(d), 80.313. There are three such entries in the section 80.207(d) table, one for ship station radiotelegraphy, one for ship station radiotelephony, and one for land station radiotelephony.

³⁷⁸ See 47 C.F.R. § 2.106, n.US299 (providing that “[t]he 1615-1705 kHz band in Alaska is also allocated to the maritime mobile services and the Alaska fixed service on a secondary basis to Region 2 broadcast operations.”).

³⁷⁹ See Review of Part 87 of the Commission’s Rules Concerning the Aviation Radio Service, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 01-289, 18 FCC Rcd 21432 ¶ 85 (2003) (proposing specifically to remove the reference to the 14000-14400 MHz band in 47 C.F.R. § 87.187(x) and to also remove from the Table of Frequency Allocations, 47 C.F.R. § 2.106, the allocation for radionavigation in the 14000-14200 MHz band).

³⁸⁰ See generally 47 C.F.R. §§ 1.1202, 1.1203, 1.1206(a).

³⁸¹ 5 U.S.C. § 603.

to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the RFA.³⁸²

91. As required by the RFA,³⁸³ the Commission has also prepared a FRFA of the rules adopted in the *Sixth Report and Order* in PR Docket No. 92-257. The FRFA for the *Sixth Report and Order* in PR Docket No. 92-257 is contained in Appendix D. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the *Sixth Report and Order* in PR Docket No. 92-257, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the RFA.³⁸⁴

92. As required by the RFA,³⁸⁵ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the rules proposed or discussed in the *Second Further Notice of Proposed Rule Making* in WT Docket No. 00-48. The IRFA for the *Second Further Notice of Proposed Rule Making* in WT Docket No. 00-48 is contained in Appendix E. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the *Second Further Notice of Proposed Rule Making* in WT Docket No. 00-48, and they should have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the *Second Further Notice of Proposed Rule Making* in WT Docket No. 00-48, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act.³⁸⁶

C. Comment Dates

93. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before [90 days after Federal Register publication] and reply comments on or before [120 days after Federal Register publication]. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.³⁸⁷

94. Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. All filings must be addressed to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th St., S.W., Washington, D.C. 20554. Filings can be sent first class by the U.S. Postal Service, by an overnight courier or hand and message-delivered. Hand and message-delivered

³⁸² *Id.* § 603(a).

³⁸³ *Id.* § 603.

³⁸⁴ *Id.* § 603(a).

³⁸⁵ *Id.* § 603.

³⁸⁶ *Id.* § 603(a).

³⁸⁷ See Electronic Filing of Documents in Rulemaking Proceedings, *Report and Order*, GC Docket No. 97-113, 13 FCC Red 11322 (1998).

paper filings must be delivered to 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. Overnight courier (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

95. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to: Jeffrey Tobias, Wireless Telecommunications Bureau, 445 12th St., S.W., Room 4-A366, Washington, D.C. 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using Microsoft Word or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding (including the lead docket number in this case, WT Docket No. 00-48), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters should send diskette copies to the Commission's copy contractor, Qualex International, Inc., 445 12th St., S.W., Room CY-B402, Washington, D.C. 20054.

D. Paperwork Reduction Act

96. This *Second Report and Order, Sixth Report and Order, and Second Further Notice of Proposed Rule Making* does not contain any new or modified information collection.

E. Further Information

97. For further information, contact Jeffrey Tobias, jeff.tobias@fcc.gov, or Ghassan Khalek, ghassan.khalek@fcc.gov, Wireless Telecommunications Bureau, (202) 418-0680, or TTY (202) 418-7233.

98. Alternative formats (computer diskette, large print, audiocassette and Braille) are available to persons with disabilities by contacting Brian Millin at (202) 418-7426, TTY (202) 418-7365, or at bmillin@fcc.gov. This *Report and Order and Further Notice of Proposed Rule Making* can also be downloaded at: <http://www.fcc.gov/>.

F. Ordering Clauses

99. Accordingly, IT IS ORDERED that, pursuant to the authority of Sections 4(i), 303(r), and 332(a)(2) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), 332(a)(2), Parts 2, 13 and 80 of the Commission's Rules ARE AMENDED as set forth in the attached Appendix B, effective sixty days after publication in the Federal Register.

100. IT IS FURTHER ORDERED that, pursuant to Sections 4(i), 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r) and 403, this *Second Report and Order, Sixth Report and Order, and Second Further Notice of Proposed Rule Making* IS HEREBY ADOPTED, and NOTICE IS HEREBY GIVEN of the proposed regulatory changes described in the *Second Further Notice of Proposed of Rule Making* and contained in Appendix E.

101. IT IS FURTHER ORDERED that the Motion to Accept Late Filing filed by the GMDSS Task Force is GRANTED and the late-filed comments of the GMDSS Task Force and Dr. Schenk of America LLC are HEREBY ACCEPTED into the record in this proceeding.

102. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this *Second Report and Order, Sixth Report and Order, and Second Further Notice of Proposed Rule Making*, including the Final Regulatory Flexibility Analysis for the *Second Report and Order* in WT Docket No. 00-48, the Final Regulatory Flexibility Analysis for the *Sixth Report and Order* in PR Docket No. 92-257, and the Initial Regulatory Flexibility Analysis for

the *Second Further Notice of Proposed Rule Making* in WT Docket No. 00-48, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A**Parties Submitting Comments and Reply Comments in WT Docket No. 00-48**

The following list contains the names of parties filing comments and reply comments in response to the *Further Notice of Proposed Rule Making* in WT Docket No. 00-48:

Comments

Owen Anderson
Kurt Anderson
Dr. Schenk of America LLC
MariTEL, Inc. (Maritel)
National GMDSS Implementation Task Force (The Task Force)
Ronald H. Neuman/Maritime Institute of Technology and Graduate Studies (Neuman)
Passenger Vessel Association (PVA)
Radio Technical Commission for Maritime Services (RTCM)
Recreational Boating Association of Washington (RBAW)
United States Coast Guard (USCG)

Reply Comments

Maritel
RBAW

Parties Submitting Comments and Reply Comments in PR Docket No. 92-257

The following list contains the names of parties filing comments and reply comments in response to the *Fourth Further Notice of Proposed Rule Making* in PR Docket No. 92-257:

Comments

Maritel
USCG

Reply Comments

The Association of Public-Safety Communications Officials-International, Inc. (APCO)
Maritel

APPENDIX B**FINAL RULES**

Chapter I of Title 47 of the Code of Federal Regulations, Parts 13 and 80, is amended as follows:

II. PART 13 -- COMMERCIAL RADIO OPERATORS

1. The authority citation for Part 13 continues to read as follows:

AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303.

2. Section 13.203 is amended by revising paragraph (a)(5), redesignating paragraphs (a)(6) and (a)(7) as paragraphs (a)(7) and (a)(8), and adding a new paragraph (a)(6) to read as follows:

§ 13.203 Examination elements.

(a) * * *

(5) Element 7: GMDSS radio operating practices. 100 questions concerning GMDSS radio operating procedures and practices sufficient to show detailed practical knowledge of the operation of all GMDSS sub-systems and equipment; ability to send and receive correctly by radio telephone and narrow-band direct-printing telegraphy; detailed knowledge of the regulations applying to radio communications, knowledge of the documents relating to charges for radio communications and knowledge of those provisions of the International Convention for the Safety of Life at Sea which relate to radio; sufficient knowledge of English to be able to express oneself satisfactorily both orally and in writing; knowledge of and ability to perform each function listed in § 80.1081; and knowledge covering the requirements set forth in IMO Assembly Resolution on Training for Radio Personnel (GMDSS), Annex 3. The minimum passing score is 75 questions answered correctly.

(6) Element 7R: Restricted GMDSS radio operating practices. 50 questions concerning those GMDSS radio operating procedures and practices that are applicable to ship stations on vessels that sail exclusively in sea area A1, as defined in § 80.1069 of this chapter, sufficient to show detailed practical knowledge of the operation of pertinent GMDSS sub-systems and equipment; ability to send and receive correctly by radio telephone and narrow-band direct-printing telegraphy; detailed knowledge of the regulations governing radio communications within sea area A1, knowledge of the pertinent documents relating to charges for radio communications and knowledge of the pertinent provisions of the International Convention for the Safety of Life at Sea; sufficient knowledge of English to be able to express oneself satisfactorily both orally and in writing; knowledge of and ability to perform each pertinent function listed in § 80.1081; and knowledge covering the pertinent requirements set forth in IMO Assembly Resolution on Training for Radio Personnel (GMDSS), Annex 3. The minimum passing score is 38 questions answered correctly.

III. PART 80 -- STATIONS IN THE MARITIME SERVICES

1. The authority citation for Part 80 continues to read as follows:

AUTHORITY: Secs. 4, 303, 307(e), 309, and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, 307(e), 309, and 332, unless otherwise noted. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609; 3 UST 3450, 3 UST 4726, 12 UST 2377.

2. Section 80.15 is amended by revising paragraph (e)(2) to read as follows:

§ 80.15 Eligibility for station license.

* * * * *

(e) * * *

(2) A 406.0-406.1 MHz EPIRB may be used by any ship required by U.S. Coast Guard regulations to carry an EPIRB or by any ship that is equipped with a VHF ship radio station. An INMARSAT-E EPIRB may be used by any ship required by U.S. Coast Guard regulations to carry an EPIRB or by any ship that is equipped with a VHF radio station, provided that the ship is not operating in sea area A4 as defined in § 80.1069(a)(4) of this part.

* * * * *

3. Section 80.59 is amended by revising paragraph (c)(1)(x) to read as follows:

§ 80.59 Compulsory ship inspections.

* * * * *

(c) * * *

(1) * * *

(x) Type and quantity of radio equipment on board, including:

(A) VHF Radio Installation (indicate if GMDSS approved);

(B) Single Side-Band (SSB) (indicate the band of operation, MF or HF and indicate if GMDSS approved);

(C) Category 1, 406 MHz EPIRB (GMDSS approved);

(D) NAVTEX Receiver (GMDSS approved);

(E) Survival Craft VHF (GMDSS approved);

(F) 9 GHz Radar Transponder (GMDSS approved);

(G) Ship Earth Station;

(H) 2182 Radiotelephone Auto Alarm

(I) Reserve Power Supply (capability); and

(J) Any other equipment.

* * * * *

4. Section 80.95 is amended by revising paragraph (a) to read as follows:

§ 80.95 Message charges.

(a) Except as specified in § 20.15(c) of this chapter with respect to commercial mobile radio service providers, charges must not be made for service of:

* * * * *

5. Section 80.98 is amended to read as follows:

§ 80.98 Radiotelegraph testing procedures.

Stations authorized to use telegraphy may conduct tests on any assigned frequency. Emissions must not cause harmful interference. When radiation is necessary the radiotelegraph testing procedure described in this paragraph must be followed:

(a) The operator must not interfere with transmissions in progress.

(b) The operator must transmit "IE" (two dots, space, one dot) on the test frequency as a warning that test emissions are about to be made.

(c) If any station transmits "AS" (wait), testing must be suspended. When transmission of "IE" is resumed and no response is heard, the test may proceed.

(d) Test signals composed of a series of "VVV" having a duration of not more than ten seconds, followed by the call sign of the testing station will be transmitted. The call sign must be sent clearly at a speed of approximately 10 words per minute. This test transmission must not be repeated until a period of at least one minute has elapsed.

* * * * *

6. Section 80.102 is amended by revising paragraph (f) to read as follows:

§ 80.102 Radiotelephone station identification.

* * * * *

(f) VHF public coast stations licensed to serve a predetermined geographic service area are not required to provide station identification under this section. A site-based VHF public coast station may identify by means of the approximate geographic location of the station or the area it serves when it is the only VHF public coast station serving the location or there will be no conflict with the identification of any other station.

* * * * *

7. Section 80.142 is amended by removing paragraph (c)(1)(i) and redesignating paragraphs (c)(1)(ii) and (c)(1)(iii) as (c)(1)(i) and (c)(1)(ii).

8. Section 80.203 is amended by adding a new paragraph (m)(6) to read as follows:

§ 80.203 Authorization of transmitters for licensing.

* * * * *

(m) * * *

(6) No ship station shall include any device or provision capable of transmitting any tone or signal on a distress frequency for any purpose unless specific provisions exist in this Part authorizing such tone or signal.

* * * * *

9. Section 80.207 is amended by revising paragraph (d) to read as follows:

§ 80.207 Classes of emission.

* * * * *

(d) The authorized classes of emission are as follows:

Types of stations	Classes of emission
Ship Stations ¹	
Radiotelegraphy:	
100-160 kHz.....	A1A
405-525 kHz.....	A1A, J2A
1605-27500 kHz:	
Manual ^{15, 16, 17}	A1A, J2A, J2B, J2D
DSC ⁶	F1B, J2B
NB-DP ^{14, 16}	F1B, J2B, J2D
Facsimile.....	F1C, F3C, J2C, J3C
156-162 MHz ² :	
DSC.....	F1B, F2B, F2C, F3C, F1D, F2D
DSC.....	G2B
216-220 MHz ³	F1B, F2B, F2C, F3C
1626.5-1646.5 MHz.....	(4)
Radiotelephony:	
1605-27500 kHz ^{5, 16}	H3E, J2D, J3E, R3E
27.5-470 MHz ⁶	G3D, G3E
1626.5-1646.5 MHz.....	(4)
Radiodetermination:	
285-325 kHz ⁷	A1A, A2A
405-525 kHz (Direction Finding) ⁸	A3N, H3N, J3N, NON
154-459 MHz: ¹²	A1D, A2D, F1D, F2D, G1D, G2D
2.4-9.5 GHz.....	PON
14.00-14.05 GHz.....	F3N
Land Stations ¹	
Radiotelegraphy:	
100-160 kHz.....	A1A
405-525 kHz.....	A1A, J2A
1605-2850 kHz:	
Manual.....	A1A, J2A
Facsimile.....	F1C, F3C, J2C, J3C
Alaska-Fixed.....	A1A, J2A
4000-27500 kHz:	
Manual ¹⁶	A1A, J2A, J2B, J2D
DSC ¹⁸	F1B, J2B
NB-DP ^{14, 18}	F1B, J2B, J2D
Facsimile.....	F1C, F3C, J2C, J3C
Alaska-Fixed ^{17, 18}	A1A, A2A, F1B, F2B, J2B, J2D
72-76 MHz.....	A1A, A2A, F1B, F2B
156-162 MHz ^{2, 20} :	
DSC.....	F1B, F2B, F2C, F3C, F1D, F2D
DSC.....	G2B
216-220 MHz ³	F1B, F2B, F2C, F3C

Radiotelephony:	
1605-27500 kHz ^{18, 19}	H3E, J3E, R3E
72-76 MHz.....	A3E, F3E, G3E
156-470 MHz.....	G3E
Radiodetermination:	
2.4-9.6 GHz.....	PON
Distress, Urgency and Safety ^{8, 9}	
2182 kHz ^{10, 11}	A2B, A3B, H2B, H3E, J2B, J3E
121.500 MHz.....	A3E, A3X, N0N
123.100 MHz.....	A3E
156.750 and 156.800 MHz ¹³	G3E, G3N
243.000 MHz.....	A3E, A3X, N0N
406.025 MHz.....	G1D

¹ Excludes distress, EPIRBs, survival craft, and automatic link establishment.

² Frequencies used for public correspondence and in Alaska 156.425 MHz. *See* §§ 80.371(c), 80.373(f) and 80.385(b). Transmitters approved before January 1, 1994, for G3E emissions will be authorized indefinitely for F2C, F3C, F1D and F2D emissions. Transmitters approved on or after January 1, 1994, will be authorized for F2C, F3C, F1D or F2D emissions only if they are approved specifically for each emission designator.

³ Frequencies used in the Automated Maritime Telecommunications System (AMTS). *See* § 80.385(b).

⁴ Types of emission are determined by the INMARSAT Organization.

⁵ Transmitters approved prior to December 31, 1969, for emission H3E, J3E, and R3E and an authorized bandwidth of 3.5 kHz may continue to be operated. These transmitters will not be authorized in new installations.

⁶ G3D emission must be used only by one-board stations for maneuvering or navigation.

⁷ Frequencies used for cable repair operations. *See* § 80.375(b).

⁸ For direction finding requirements see § 80.375.

⁹ Includes distress emissions used by ship, coast, EPIRBs and survival craft stations.

¹⁰ On 2182 kHz A1B, A2B, H2B and J2B emissions indicate transmission of the auto alarm signals.

¹¹ Ships on domestic voyages must use J3E emission only.

¹² For frequencies 154.585 MHz, 159.480 MHz, 160.725 MHz, 160.785 MHz, 454.000 MHz and 459.000 MHz, authorized for offshore radiolocation and related telecommand operations.

¹³ Class C EPIRB stations may not be used after February 1, 1999.

¹⁴ NB-DP operations which are not in accordance with CCIR Recommendation 625 or 476 are permitted to utilize any modulation, so long as emissions are within the limits set forth in § 80.211(f).

¹⁵ J2B is permitted only on 2000-27500 kHz.

¹⁶ J2D is permitted only on 2000-27500 kHz, and ship stations employing J2D emissions shall at no time use a peak envelope power in excess of 1.5 kW per channel.

¹⁷ J2B and J2D are permitted provided they do not cause harmful interference to A1A.

¹⁸ Coast stations employing J2D emissions shall at no time use a peak envelope power in excess of 10 kW per channel.

¹⁹ J2D is permitted only on 2000-27500 kHz.

²⁰ If a station uses another type of digital emission, it must comply with the emission mask requirements of § 90.210, except that Automatic Identification System (AIS) transmissions do not have to comply with the emission mask requirements of § 90.210.

* * * * *

10. Section 80.213 is amended by revising paragraph (d) to read as follows:

§ 80.213 Modulation requirements.

* * * * *

(d) Ship and coast station transmitters operating in the 156-162 MHz and 216-220 bands must be capable of proper operation with a frequency deviation that does not exceed +/- 5 kHz when using any emission authorized by 80.207.

* * * * *

11. Section 80.215 is amended by revising paragraph (g) to read as follows:

§ 80.215 Transmitter power.

* * * * *

(g) The carrier power of ship station radiotelephone transmitters, except portable transmitters, operating in the 156-162 MHz band must be at least 8 but not more than 25 watts. Transmitters that use 12 volt lead acid storage batteries as a primary power source must be measured with a primary voltage between 12.2 and 13.7 volts DC. Additionally, unless otherwise indicated, equipment in radiotelephone ship stations operating in the 156-162 MHz band must meet the following requirements:

(1) All transmitters and remote control units must be capable of reducing the carrier power to one watt or less;

(2) Except as indicated in (4) of this paragraph, all transmitters manufactured after January 21, 1987, or in use after January 21, 1997, must automatically reduce the carrier power to one watt or less when the transmitter is tuned to 156.375 MHz or 156.650 MHz, and must be provided with a manual override switch which when held by an operator will permit full carrier power operation on 156.375 MHz and 156.650 MHz;

(3) Except as indicated in (4) of this paragraph, all ship station transmitters installed after [one year after the effective date of these rules] must be capable of tuning to 156.775 MHz and 156.825 MHz and must automatically reduce the carrier power to one watt or less, with no manual override capability, when the transmitter is tuned to either 156.775 MHz or 156.825 MHz;

(4) Hand-held portable transmitters are not required to comply with the automatic reduction of carrier power in (g)(2) of this section; and

(5) Transmitters dedicated for use on public correspondence duplex channels as additional equipment to a VHF ship station in the Great Lakes which meet all pertinent rules in this part are not required to reduce their carrier power to one watt.

* * * * *

12. Section 80.275 is added to read as follows:

§ 80.275 Technical Requirements for Automatic Identification Systems (AIS) equipment.

(a) Prior to submitting a certification application for an AIS device, the following information must be submitted in duplicate to the Commandant (G-MSE), U.S. Coast Guard, 2100 2nd Street, S.W., Washington D.C. 20593-0001:

(1) The name of the manufacturer or grantee and the model number of the AIS device;

(2) Copies of the test report and test data obtained from the test facility showing that the device complies with the environmental and operational requirements identified in Section 80.1101 of this Part.

(b) After reviewing the information described in paragraph (a) of this section, the U.S. Coast Guard will issue a letter stating whether the AIS device satisfies all of the requirements specified in Section 80.1101 of this Part.

(c) A certification application for an AIS device submitted to the Commission must contain a copy of the U.S. Coast Guard letter stating that the device satisfies all of the requirements specified in Section 80.1101 of this Part, a copy of the technical test data, and the instruction manual(s).

13. Section 80.301 is amended by removing paragraph (a) and redesignating paragraphs (b) through (d) as paragraphs (a) through (c).

14. Section 80.302 is amended by revising paragraph (a) to read as follows:

§ 80.302 Notice of discontinuance, reduction, or impairment of service involving a distress watch.

(a) When changes occur in the operation of a public coast station which include discontinuance, relocation, reduction or suspension of a watch required to be maintained on 2182 kHz or 156.800 MHz, notification must be made by the licensee to the nearest district office of the U.S. Coast Guard as soon as practicable. The notification must include the estimated or known resumption time of the watch.

* * * * *

15. Section 80.304 is amended by removing paragraph (a) and retaining paragraph (b) as an undesignated paragraph.

16. Section 80.305 is amended by removing paragraph (a)(1) and redesignating paragraphs (a)(2) and (a)(3) as paragraphs (a)(1) and (a)(2).

17. Section 80.306 is removed.

18. Section 80.319 is amended by revising paragraph (c) to read as follows:

§ 80.319 Radiotelegraph distress call and message transmission procedure.

* * *

(c) The distress message, preceded by the distress call, must be repeated at intervals until an answer is received. The radiotelegraph alarm signal may also be repeated, if necessary.

* * * * *

19. Section 80.329 is amended by revising paragraph (d) to read as follows:

§ 80.329 Safety signals.

* * * * *

(d) The safety signal and call must be sent on one of the international distress frequencies (2182 kHz or 156.8 MHz radiotelephone). Stations which cannot transmit on a distress frequency may use any other available frequency on which attention might be attracted.

* * * * *

20. Section 80.330 is amended by removing paragraph (b) and redesignating paragraphs (c) and (d) as paragraphs (b) and (c).

21. Section 80.355 is amended by removing paragraph (b) and redesignating paragraphs (c) and (d) as paragraphs (b) and (c).

22. Section 80.357 is amended by removing paragraph (b)(2)(iv).

23. Section 80.371 is amended by revising paragraphs (c)(1)(ii) and (c)(1)(iii) to read as follows:

§ 80.371 Public correspondence frequencies.

* * * * *

(c) * * *

(1) * * * * *

(ii) Service areas in the marine VHF 156-162 MHz band are VHF Public Coast Station Areas (VPCSAs). As listed in the table in this paragraph, VPCSAs are based on, and composed of one or more of, the U.S. Department of Commerce’s 172 Economic Areas (EAs). See 60 FR 13114 (March 10, 1995). In addition, the Commission shall treat Guam and the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands, American Samoa, and the Gulf of Mexico as EA-like areas, and has assigned them EA numbers 173-176, respectively. Maps of the EAs and VPCSAs are available for public inspection and copying at the FCC Public Reference Room, Room CY-A257, 445 12th Street, S.W., Washington, D.C. 20554. Except as shown in the table, the frequency pairs listed in paragraph (c)(1)(i) of this section are available for assignment to a single licensee in each of the VPCSAs listed in the table in this paragraph. In addition to the EAs listed in the table in this paragraph, each VPCSA also includes the adjacent waters under the jurisdiction of the United States. * * *

(iii) Subject to paragraph (c)(3) of this section, each licensee may also operate on 12.5 kHz offset frequencies in areas where the licensee is authorized on both frequencies adjacent to the offset frequency, and in areas where the licensee on the other side of the offset frequency consents to the licensee’s use of the adjacent offset frequency. Coordination with Canada is required for offset operations under any circumstance in which operations on either adjoining 25 kHz channel would require such coordination. See § 80.57 of this part.

* * * * *

24. Section 80.373 is amended by revising paragraph (f) to read as follows:

§ 80.373 Private communications frequencies.

* * * * *

(f) Frequencies in the 156-162 MHz band. The following tables describe the carrier frequencies available in the 156-162 MHz band for radiotelephone communications between ship and private coast stations. (Note: the letter “A” following the channel designator indicates simplex operation on a channel designated internationally as a duplex channel.)

Frequencies in the 156-162 MHz band

Channel designator	Carrier frequency (MHz) Ship transmit	Carrier frequency (MHz) Coast transmit	Points of communication (Intership and between Coast and ship unless otherwise indicated)
--------------------	--	---	--

Port Operations

01A ¹	156.050	156.050		
63A ¹	156.175	156.175		
05A ²	156.250	156.250		
65A	156.275	156.275		
66A	156.325	156.325		
12 ³	156.600	156.600		
73	156.675	156.675		
14 ³	156.700	156.700		
74	156.725	156.725		
75 ¹⁸	156.775	156.775		
76 ¹⁸	156.825	156.825		
77 ⁴	156.875		Intership only.
20A ¹²	157.000		Intership only.

Navigational (Bridge-to-Bridge)⁵

13 ⁶	156.650	156.650	
67 ⁷	156.375	156.375	

Commercial

01A ¹	156.050	156.050	Intership only. Do.	
63A ¹	156.175	156.175		
07A	156.350	156.350		
67 ⁷	156.375	.....	
08	156.400	.....	
09	156.450	156.450		
10	156.500	156.500		
11 ³	156.550	156.550		
18A	156.900	156.900		
19A	156.950	156.950		
79A	156.975	156.975		
80A	157.025	157.025		
88A ⁸	157.425		Intership only.
72 ¹⁴	156.625		Intership only.

Digital Selective Calling

70 ¹⁵	156.525	156.525	
------------------------	---------	---------	--

Noncommercial

68 ¹⁷	156.425	156.425	Intership only. Great Lakes only.
09 ¹⁶	156.450	156.450	
69	156.475	156.475	
71	156.575	156.575	
72	156.625	.....
78A	156.925	156.925	
79A	156.975	156.975	

80A	157.025	157.025	Do.
67 ¹⁴	156.375	.....	Intership only.
Distress, Safety and Calling			
16	156.800	156.800	
Intership Safety			
06	156.300	.....	a. Intership, or b. For SAR: Ship and aircraft for the U.S. Coast Guard.
Environmental			
15 ¹³ .....	.....	156.750	Coast to ship only.
Maritime Control			
17 ^{9, 10}	156.850	156.850	
Liaison and Safety Broadcasts, U.S. Coast Guard			
22A ¹¹	157.100	157.100	Ship, aircraft, and coast stations of the U.S. Coast Guard and at Lake Mead, Nev., ship and coast stations of the National Park Service, U.S. Department of the Interior.

¹ 156.050 MHz and 156.175 MHz are available for port operations and commercial communications purposes when used only within the U.S. Coast Guard designated Vessel Traffic Services (VTS) area of New Orleans, on the lower Mississippi River from the various pass entrances in the Gulf of Mexico to Devil’s Swamp Light at River Mile 242.4 above head of passes near Baton Rouge.

² 156.250 MHz is available for port operations communications use only within the U.S. Coast Guard designated VTS radio protection areas of New Orleans and Houston described in § 80.383. 156.250 MHz is available for intership port operations communications used only within the area of Los Angeles and Long Beach harbors, within a 25-nautical mile radius of Point Fermin, California.

³ 156.550 MHz, 156.600 MHz and 156.700 MHz are available in the U.S. Coast Guard designated port areas only for VTS communications and in the Great Lakes available primarily for communications relating to the movement of ships in sectors designated by the St. Lawrence Seaway Development Corporation or the U.S. Coast Guard. The use of these frequencies outside VTS and ship movement sector protected areas is permitted provided they cause no interference to VTS and ship movement communications in their respective designated sectors.

⁴ Use of 156.875 MHz is limited to communications with pilots regarding the movement and docking of ships. Normal output power must not exceed 1 watt.

⁵ 156.375 MHz and 156.650 MHz are available primarily for intership navigational communications. These frequencies are available between coast and ship on a secondary basis when used on or in the vicinity of locks or drawbridges. Normal output power must not exceed 1 watt. Maximum output power must not exceed 10 watts for coast stations or 25 watts for ship stations.

⁶ On the Great Lakes, in addition to bridge-to-bridge communications, 156.650 MHz is available for vessel control purposes in established vessel traffic systems. 156.650 MHz is not available for use in the Mississippi River from South Pass Lighted Whistle Buoy “2” and Southwest Pass entrance Mid-channel Lighted Whistle Buoy to mile 242.4 above Head of Passes near Baton Rouge. Additionally it is not available for use in the Mississippi River-Gulf Outlet, the Mississippi River-Gulf Outlet Canal, and the Inner Harbor Navigational Canal, except to aid the transition from these areas.

⁷ Use of 156.375 MHz is available for navigational communications only in the Mississippi River from South Pass Lighted Whistle Buoy “2” and Southwest Pass entrance Mid-channel Lighted Whistle Buoy to mile 242.4 above Head of Passes near Baton Rouge, and in addition over the full length of the Mississippi River-Gulf Outlet Canal from entrance to its junction with the Inner Harbor Navigational Canal, and over the full length of the Inner Harbor Navigational Canal from its junction with the Mississippi River to its entry to Lake Pontchartrain at the New Seabrook vehicular bridge.

⁸ Within 120 km (75 miles) of the United States/Canada border, in the area of the Puget Sound and the Strait of Juan de Fuca and its approaches, 157.425 MHz is half of the duplex pair designated as Channel 88. In this area, Channel 88 is available to ship stations for communications with public coast stations only. More than 120 km (75 miles) from the United States/Canada border, in the area of the Puget Sound and the Strait of Juan de Fuca, its approaches, the Great Lakes, and the St. Lawrence Seaway, 157.425 MHz is available for intership and commercial communications. Outside Puget Sound area and its approaches and the Great Lakes, 157.425 MHz is also available for communications between commercial fishing vessels and associated aircraft while engaged in commercial fishing activities.

⁹ When the frequency 156.850 MHz is authorized, it may be used additionally for search and rescue training exercises conducted by state or local governments.

¹⁰ The frequency 156.850 MHz is additionally available to coast stations on the Great Lakes for transmission of scheduled Coded Marine Weather Forecasts (MAFOR), Great Lakes Weather Broadcast (LAWEB) and unscheduled Notices to Mariners or Bulletins. F3C and J3C emissions are permitted. Coast stations on the Great Lakes must cease weather broadcasts which cause interference to stations operating on 156.800 MHz until the interference problem is resolved.

¹¹ The frequency 157.100 MHz is authorized for search and rescue training exercises by state or local government in conjunction with U.S. Coast Guard stations. Prior U.S. Coast Guard approval is required. Use must cease immediately on U.S. Coast Guard request.

¹² The duplex pair for channel 20 (157.000/161.600 MHz) may be used for ship to coast station communications.

¹³ Available for assignment to coast stations, the use of which is in accord with an agreed program, for the broadcast of information to ship stations concerning the environmental conditions in which vessels operate, i.e., weather; sea conditions; time signals; notices to mariners; and hazards to navigation.

¹⁴ Available only in the Puget Sound and the Strait of Juan de Fuca.

¹⁵ The frequency 156.525 MHz is to be used exclusively for distress, safety and calling using digital selective calling techniques. No other uses are permitted.

¹⁶ The frequency 156.450 MHz is available for intership, ship and coast general purpose calling by noncommercial vessels, such as recreational boats and private coast stations.

¹⁷ The frequency 156.425 MHz is assigned by rule to private coast stations in Alaska for facsimile transmissions as well as voice communications.

¹⁸ The frequencies 156.775 and 156.825 MHz are available for navigation-related port operations or ship movement only, and all precautions must be taken to avoid harmful interference to channel 16. Transmitter output power is limited to 1 watt for ship stations, and 10 watts for coast stations.

* * * * *

25. Section 80.405 is amended by redesignating paragraph (c) as (c)(1) and adding new paragraph (c)(2) to read as follows:

§ 80.405 Station license.

* * * * *

(c) Posting.

(1) The current station authorization for a station other than a public coast station, or a clearly legible copy, must be posted at the principal control point of each station. If a copy is posted, it must indicate the location of the original. When the station license cannot be posted as in the case of a marine utility station operating at temporary unspecified locations or the ship or recreational boat does not have an enclosed wheelhouse, it must be kept where it will be readily available for inspection. The licensee of a station on board a ship subject to Part II or III or Title III of the Communications Act or the Safety Convention must retain the most recently expired ship station license in the station records until the first Commission inspection after the expiration date.

(2) Public coast stations authorized under this part must make available either a clearly legible copy of the authorization for each station at the principal control point of the station or an address or location where the current authorization may be found and a telephone number of that authorization's representative.

* * * * *

26. Section 80.409 is amended by revising paragraphs (b)(2) and (c) to read as follows, and by removing paragraphs (d)(4), (d)(5), and (d)(11), and redesignating paragraphs (d)(6) through (d)(10) as paragraphs (d)(4) through (d)(8).

§ 80.409 Station logs.

* * * * *

(b) * * *

(2) Logs containing entries required by paragraph (c) of this section must be kept either at the principal control point of the station or electronically filed at the station licensee's primary office or available to the Commission via secured access to the licensee's Internet web site. Logs containing entries required by paragraphs (e) and (f) of this section must be kept at the principal radiotelephone operating location while the vessel is being navigated. All entries in their original form must be retained on board the vessel for at least 30 days from the date of entry. Additionally, logs required by paragraph (f) of this section must be retained on board the vessel for a period of 2 years from the date of the last inspection of the ship radio station.

(c) *Public coast station logs.* Public coast stations must maintain a log, whether by means of written or automatic logging or a combination thereof. The log must contain the following information:

1) "ON DUTY" must be entered by the operator beginning a duty period, followed in the case of a written log by the operator's signature. "OFF DUTY" must be entered by the operator being relieved of or terminating duty, followed in the case of a written log by the operator's signature.

(2) The date and time of making an entry must be shown opposite the entry.

(3) Failure of equipment to operate as required and incidents tending to unduly delay communication must be entered.

(4) All measurements of the transmitter frequency(ies) must be entered with a statement of any corrective action taken.

(5) Entries must be made giving details of all work performed which may affect the proper operation of the station. The entry must be made, dated and in the case of a written log signed by the operator who supervised or performed the work and, unless the operator is regularly employed on a full-time basis at the station, must also include the mailing address, class, serial number, and expiration date of the operator license.

(6) Entries must be made about the operation of the antenna tower lights when the radio station has an antenna structure requiring illumination by part 17 of this chapter.

(7) All distress or safety related calls transmitted or received must be entered, together with the frequency used and the position of any vessel in need of assistance.

* * * * *

27. Section 80.471 is amended to read as follows:

§ 80.471 Discontinuance or impairment of service.

Except as specified in § 20.15(b)(3) of this chapter with respect to commercial mobile radio service providers, a public coast station must not discontinue or impair service unless authorized to do so by the Commission.

* * * * *

28. Section 80.905 is amended by revising paragraph (a) to read as follows:

§ 80.905 Vessel radio equipment.

(a) Vessels subject to Part III of Title III of the Communications Act that operate in the waters described in §80.901 must, at a minimum, be equipped as follows:

(1) Vessels operated solely within the communications range of a VHF public coast station or U.S. Coast Guard station that maintains a watch on 156.800 MHz while the vessel is navigated must be equipped with a VHF-DSC radiotelephone installation, except that a VHF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A1 coverage is established. Vessels in this category must not operate more than 20 nautical miles from land.

(2) Vessels operated beyond the 20 nautical mile limitation specified in paragraph (a)(1) of this section, but not more than 100 nautical miles from the nearest land, must be equipped with a MF-DSC frequency transmitter capable of transmitting J3E emission and a receiver capable of reception of J3E emission within the band 1710 to 2850 kHz, in addition to the VHF-DSC radiotelephone installation required by paragraph (a)(1) of this section, except that a MF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A2 coverage is established. The MF or MF-DSC transmitter and receiver must be capable of operation on 2670 kHz.

(3) Vessels operated more than 100 nautical miles but not more than 200 nautical miles from the nearest land must:

(i) Be equipped with a VHF-DSC radiotelephone installation, except that a VHF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A1 coverage is established;

(ii) Be equipped with an MF-DSC radiotelephone transmitter and receiver meeting the requirements of paragraph (a)(2) of this section, except that a MF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A2 coverage is established; and

(iii) Be equipped with either:

(A) A DSC-capable single sideband radiotelephone that complies with ITU-R Rec. (series) M.493 Class A, B or E, and is capable of operating on all distress and safety frequencies in the medium frequency and high frequency bands listed in §80.369(a) and (b), on all of the ship-to-shore calling frequencies in the high frequency bands listed in §80.369(d), and on at least four of the automated mutual-assistance vessel rescue (AMVER) system HF duplex channels (this requirement may be met by the addition of such frequencies to the radiotelephone installation required by paragraph (a)(2) of this section); or

(B) If operated in an area within the coverage of an INMARSAT maritime mobile geostationary satellite in which continuous alerting is available, an INMARSAT B, C, or M ship earth station, or an INMARSAT A ship earth station if installed prior to February 12, 2004.

(iv) Be equipped with a reserve power supply meeting the requirements of §§ 80.917(b), 80.919 and 80.921, and capable of powering the single sideband radiotelephone or the ship earth station (including associated peripheral equipment) required by paragraph (a)(3)(iii) of this section, including the navigation receiver referred to in § 80.905(a)(5);

(v) Be equipped with a NAVTEX receiver conforming to the following performance standards: IMO Resolution A.525(13) and ITU-R Recommendation 540;

(vi) Be equipped with a Category I 406-406.1 MHz satellite emergency position-indicating radiobeacon (EPIRB) meeting the requirements of § 80.1061 or, if the ship is not operating in sea area A4, as defined in § 80.1069(a)(4) of this part, an automatic float-free INMARSAT-E EPIRB meeting the requirements of § 80.1063; and

(vii) Participate in the AMVER system while engaged on any voyage where the vessel is navigated in the open sea for more than 24 hours. Copies of the AMVER Bulletin are available at: AMVER Maritime Relations, USCG Battery Park Building, Room 201, New York, NY 10004-1499. Phone 212-668-7764; Fax 212-668-7684.

(4) Vessels operated more than 200 nautical miles from the nearest land must:

(i) Be equipped with two VHF-DSC radiotelephone installations, except that VHF radiotelephone installations without DSC capability are permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A1 coverage is established;

(ii) Be equipped with an MF-DSC radiotelephone transmitter and receiver meeting the requirements of paragraph (a)(2) of this section, except that a MF radiotelephone installation without DSC capability is permitted until one year after the Coast Guard notifies the Commission that shore-based sea area A2 coverage is established;

(iii) Be equipped with either:

(A) A DSC-capable independent single sideband radiotelephone that complies with ITU-R Rec. (series) M.493 Class A, B or E, and is capable of operating on all distress and safety frequencies in the medium frequency and high frequency bands listed in §80.369(a) and (b), on all of the ship-to-shore calling frequencies in the high frequency bands listed in §80.369(d), and on at least four of the automated mutual-assistance vessel rescue (AMVER) system HF duplex channels; or

(B) If operated in an area within the coverage of an INMARSAT maritime mobile geostationary satellite in which continuous alerting is available, an INMARSAT B, C, or M ship earth station, or an INMARSAT A ship earth station if installed prior to February 12, 2004.

(iv) Be equipped with a reserve power supply meeting the requirements of §§80.917(b), 80.919 and 80.921, and capable of powering the single sideband radiotelephone or the ship earth station (including associated peripheral equipment) required by paragraph (a)(4)(iii) of this section, including the navigation receiver referred to in § 80.905(a)(5);

(v) Be equipped with a NAVTEX receiver conforming to the following performance standards: IMO Resolution A.525(13) and ITU-R Recommendation 540;

(vi) Be equipped with a Category I 406-406.1 MHz satellite emergency position-indicating radiobeacon (EPIRB) meeting the requirements of § 80.1061 or, if the ship is not operating in sea area A4, as defined in § 80.1069(a)(4) of this part, an automatic float-free INMARSAT-E EPIRB meeting the requirements of § 80.1063;

(vii) Be equipped with a radiotelephone distress frequency watch receiver meeting the requirements of §80.269;

(viii) Be equipped with an automatic radiotelephone alarm signal generator meeting the requirements of §80.221; and

(ix) Participate in the AMVER system while engaged on any voyage where the vessel is navigated in the open sea for more than 24 hours. Copies of the AMVER Bulletin are available at: AMVER Maritime Relations, USCG Battery Park Building, Room 201, New York, NY 10004-1499. Phone 212-668-7764; Fax 212-668-7684.

(5) Vessels must comply with the requirements for a navigation receiver or manual updating of position information contained in § 80.1085(c) of this part.

* * * * *

29. Section 80.1061 is amended by revising paragraphs (e) and (f) to read as follows:

§ 80.1061 Special requirements for 406.0-406.1 MHz EPIRB stations.

* * * * *

(e) An identification code, issued by the National Oceanic and Atmospheric Administration (NOAA), the United States Program Manager for the 406.025 MHz COSPAS/SARSAT satellite system, must be programmed in each EPIRB unit to establish a unique identification for each EPIRB station. With each marketable EPIRB unit, the manufacturer or grantee must include a postage pre-paid registration card printed with the EPIRB identification code addressed to: NOAA/SARSAT Beacon Registration, E/SP3, Federal Building 4, Room 3320, 5200 Auth Road, Suitland, MD 20746-4304. The registration card must request the owner's name, address, telephone number, type of ship, alternate emergency contact and other information as required by NOAA. The registration card must also contain information regarding the availability to register the EPIRB at NOAA's online web-based registration database at: <http://www/beaconregistration.noaa.gov>. In addition, the following statement must be included: "WARNING -- failure to register this EPIRB with NOAA before installation could result in a monetary forfeiture being issued to the owner."

(f) To enhance protection of life and property it is mandatory that each 406.0-406.1 MHz EPIRB be registered with NOAA before installation and that information be kept up-to-date. Therefore, in addition to the identification plate or label requirements contained in §§ 2.925 and 2.926 of this chapter, each 406.0-406.1 MHz EPIRB must be provided on the outside with a clearly discernible permanent plate or label containing the following statement: "The owner of this 406.0-406.1 MHz EPIRB must register the NOAA identification code contained on this label with the National Oceanic and Atmospheric Administration (NOAA) whose address is: NOAA, NOAA/SARSAT Beacon Registration, E/SP3, Federal Building 4, Room 3320, 5200 Auth Road, Suitland, MD 20746-4304." Vessel owners shall advise NOAA in writing upon change of vessel or EPIRB ownership, transfer of EPIRB to another vessel, or any other change in registration information. NOAA will provide registrants with proof of registration and change of registration postcards.

30. Section 80.1063 is added to read as follows:

§ 80.1063 Special requirements for INMARSAT-E EPIRB stations.

(a) Notwithstanding the provisions in paragraph (b) of this section, INMARSAT-E EPIRBs must meet all the technical and performance standards contained in IEC 61097-5 Ed. 1.0, titled “Global maritime and distress safety system (GMDSS) – Part 5: INMARSAT-E – Emergency position indicating radio beacon (EPIRB) operating through the INMARSAT system – Operational and performance requirements, methods of testing and required test results,” including Annex B, 1997. IEC 61097-5 Ed. 1.0, including Annex B, is incorporated by reference. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of these standards can be inspected at the Federal Communications Commission, 445 12th Street, SW, Washington, D.C. (Reference Information Center) or at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, D.C. IEC publications can be purchased from the International Electrotechnical Commission, 3 Rue de Varembe, CH-1211 Geneva 20, Switzerland, or from the American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036, telephone (212) 642-4900.

(b) Prior to submitting a certification application for an INMARSAT-E radiobeacon, the radiobeacon must be certified by INMARSAT as complying with IEC 61097-5 Ed. 1.0. In addition, the radiobeacon must be tested as to compliance with the environmental and operational requirements identified in paragraph (b) of this section by the test facility which conducted the INMARSAT certification tests, or a test facility recognized by the U.S. Coast Guard. Information regarding recognized test facilities may be obtained from Commandant (G-MSE), U.S. Coast Guard, 2100 2nd Street, S.W., Washington, D.C. 20593-0001, <http://www.uscg.mil/hq/g-m/mse/lablist/161.011.htm>.

(1) After an INMARSAT-E PIRB has been certified by the test facility, the following information must be submitted in duplicate to the Commandant (G-MSE), U.S. Coast Guard, 2100 2nd Street, S.W., Washington D.C. 20593-0001:

- (i) The name of the manufacturer or grantee and the model number of the radiobeacon;
- (ii) Copies of the Inmarsat certification of compliance with IEC 61097-5 Ed. 1.0;
- (iii) Copies of the test report and test data obtained from the test facility showing that the radiobeacon complies with IEC 61097-5 Ed. 1.0 and the environmental and operational requirements identified in paragraph (b) of this section; and
- (iv) Instruction manuals associated with the radiobeacon, description of the test characteristics of the radiobeacon including assembly drawings, electrical schematics, description of parts list, specifications of materials, and the manufacturer’s quality assurance program.

(2) After reviewing the information described in paragraph (c)(1) of this section, the U.S. Coast Guard will issue a letter stating whether the radiobeacon satisfies all of the requirements specified in subsections (a) and (b) of this section.

(c) A certification application for an INMARSAT-EPIRB submitted to the Commission must also contain a copy of the U.S. Coast Guard letter stating that the radiobeacon satisfies all of the requirements specified in subsections (a) and (b) of this section, a copy of the technical test data, and the instruction manual(s).

(d) The manufacturer or grantee must include with each marketable INMARSAT-E EPIRB appropriate material for registration of the radiobeacon with INMARSAT, along with a written warning that failure to register the radiobeacon could delay rescue services in an emergency.

(e) To enhance protection of life and property it is mandatory that each INMARSAT-E EPIRB be registered with INMARSAT before installation and that information be kept up-to-date. Therefore, in addition to the identification plate or label requirements contained in §§2.925 and 2.926 of this chapter, each INMARSAT-E EPIRB must be provided on the outside with a clearly discernable permanent plate or label containing the following statement: “The owner of this INMARSAT-E EPIRB must register the NOAA identification code contained on this label with INMARSAT at the following address: INMARSAT, 99 City Road, London, EC1Y 1AX, United Kingdom.” Vessel owners shall advise INMARSAT in writing upon change of vessel or EPIRB ownership, transfer of EPIRB to another vessel, or any other change in registration information.

(f) For INMARSAT-E EPIRBs whose identification code can be changed after manufacture, the identification code shown on the plate or label must be easily replaceable using commonly available tools.

* * * * *

31. Section 80.1077 is revised to read as follows:

§ 80.1077 Frequencies.

The following table describes the frequencies used in the Global Maritime Distress and Safety System:

Alerting:

406.0-406.1 EPIRBs.....	406.0-406.1 MHz (Earth-to-space). 1544-1545 MHz (space-to-Earth).
INMARSAT-E EPIRBs.....	1626.5-1645.5 MHz (Earth-to-space).
INMARSAT Ship Earth Stations capable of voice and/or direct printing.....	1626.5-1645.5 MHz (Earth-to-space).
VHF DSC Ch. 70.....	156.525 MHz ¹ .
MF/HF DSC ^{2 11}	2187.5 kHz ³ , 4207.5 kHz, 6312 kHz, 8414.5 kHz, 12577 kHz, and 16804.5 kHz.

* * *

Locating signals:

406-406.1 EPIRB Beacons.....	121.5 MHz.
9 GHz radar transponders.....	9200-9500 MHz

* * *

Maritime safety information (MSI):

International NAVTEX.....	518 kHz ⁷
Warnings.....	490 kHz, 4209.5 kHz
NBDP.....	4210 kHz, 6314 kHz, 8416.5 kHz, 12579 kHz, 16806.5 kHz, 19680.5 kHz, 22376 kHz, 26100.5 kHz
Satellite.....	1530-1545 MHz ¹⁰

* * *

¹ Frequency 156.525 MHz can be used for ship-to-ship alerting and, if within sea area A1, for ship-to-shore alerting.

² For ships equipped with MF/HF equipment, there is a watch requirement on 2187.5 kHz, 8414.5 kHz, and one other frequency.

³ Frequency 2187.5 kHz can be used for ship-to-ship alerting and, if within sea area A2, for ship-to-shore alerting.

* * *

⁷ The international NAVTEX frequency 518 kHz is the primary frequency for receiving maritime safety information. The other frequencies are used only to augment the coverage or information provided on 518 kHz.

⁸ [Reserved.]

⁹ [Reserved.]

¹⁰ In addition to EPIRBs, 1544-1545 MHz can be used for narrowband distress and safety operations and 1645.5-1646.5 MHz can be used for relay of distress alerts between satellites. Feeder links for satellite communications are assigned from the fixed satellite service, see 47 CFR § 2.106.

¹¹ Routine calling is not permitted on MF and HF DSC frequencies.

* * * * *

32. Section 80.1083 is amended by adding paragraphs (d) through (f) to read as follows:

§ 80.1083 Ship radio installations.

* * * * *

(d) In passenger ships, a distress panel shall be installed at the conning position. This panel shall contain either one single button which, when pressed, initiates a distress alert using all radiocommunications installations required on board for that purpose or one button for each individual installation. The panel shall clearly and visually indicate whenever any button or buttons have been pressed. Means shall be provided to prevent inadvertent activation of the button or buttons. If the satellite EPIRB is used as the secondary means of distress alerting and is not remotely activated, it shall be acceptable to have an additional EPIRB installed in the wheelhouse near the conning position.

(e) In passenger ships, information on the ship's position shall be continuously and automatically provided to all relevant radiocommunications equipment to be included in the initial distress alert when the button or buttons on the distress panel is pressed.

(f) In passenger ships, a distress alarm panel shall be installed at the conning position. The distress alarm panel shall provide visual and aural indication of any distress alert or alerts received on board and shall also indicate through which radiocommunication service the distress alerts have been received.

33. Section 80.1085 is amended by revising paragraph (a)(6)(i) and by adding paragraph (d) to read as follows:

§ 80.1085 Ship radio equipment-General.

(a) * * *

(6) * * *

(i) Capable of transmitting a distress alert through the polar orbiting satellite service operating in the 406.0-406.1 MHz band (406.0-406.1 MHz EPIRB) of, if the ship is not operating in sea area A4, as defined in § 80.1069(a)(4) of this part, the 1.6 GHz band (INMARSAT-E EPIRB); and

* * * * *

(d) Every passenger ship shall be provided with means for two-way on-scene radiocommunications for search and rescue purposes using the aeronautical frequencies 121.5 and 123.1 MHz from the position from which the ship is normally navigated.

* * * * *

34. Section 80.1087 is amended by revising paragraph (a)(2) to read as follows:

§ 80.1087 Ship radio equipment—Sea area A1.

(a) * * *

(2) Through the polar orbiting satellite service on 406.0-406.1 MHz or the INMARSAT-E service in the 1.6 GHz band (this requirement may be fulfilled by the EPIRB required by §80.1085(a)(6) of this part, either by installing the EPIRB close to, or by allowing remote activation from, the position from which the ship is normally navigated); or

* * * * *

35. Section 80.1089 is amended by revising paragraph (a)(3)(i) to read as follows:

§ 80.1089 Ship radio equipment—Sea areas A1 and A2.

(a) * * * * *

(3) Means of initiating the transmission of ship-to-shore distress alerts by a radio service other than MF operating either:

(i) Through the polar orbiting satellite service on 406.0-406.1 MHz or the INMARSAT-E service in the 1.6 GHz band (this requirement may be fulfilled by the EPIRB required by § 80.1085(a)(6) of this part, either by installing the EPIRB close to, or by allowing remote activation from, the position from which the ship is normally navigated); or

* * * * *

36. Section 80.1091 is amended by revising paragraph (a)(4)(i), redesignating paragraph (b)(3)(ii) as (b)(3)(iii), and adding a new paragraph (b)(3)(ii) to read as follows:

§ 80.1091 Ship radio equipment – Sea areas A1, A2, and A3.

* * * * *

(a) * * * * *

(4) * * * * *

(i) Through the polar orbiting satellite service on 406.0-406.1 MHz or the INMARSAT-E service in the 1.6 GHz band (this requirement may be fulfilled by the EPIRB required by § 80.1085(a)(6) of this part, either by installing the EPIRB close to, or by allowing remote activation from, the position from which the ship is normally navigated); or

* * * * *

(b) * * * * *

(3) * * * * *

(ii) Through the INMARSAT-E service in the 1.6 GHz band (this requirement may be fulfilled by the EPIRB required by § 80.1085(a)(6) of this part, either by installing the EPIRB close to, or by allowing remote activation from, the position from which the ship is normally navigated); or

* * * * *

37. Section 80.1093 is amended by revising paragraph (a) to read as follows:

§ 80.1093 Ship radio equipment – Sea areas A1, A2, A3, and A4.

* * *

(a) In addition to meeting the requirements of § 80.1085 of this part, ships engaged on voyages in all sea areas must be provided with the radio installations and equipment required by § 80.1091(b), except that the equipment required by § 80.1091(b)(3)(ii) and § 80.1091(b)(3)(iii) cannot be accepted as an alternative to that required by § 80.1091(b)(3)(i), which must always be provided.

38. Section 80.1101 is amended by redesignating paragraph (c)(11) as (c)(13) and adding new paragraphs (c)(11) and (c)(12) to read as follows:

§ 80.1101 Performance standards.

* * * * *

(c) * * * * *

(11) *INMARSAT-E EPIRBs*: (i) IMO Resolution A.812(19), “Performance Standards for Float-Free Satellite EPIRBs Operating Through the Geostationary INMARSAT Satellite System on 1.6 GHz,” adopted 23 November 1995.

(ii) IMO Resolution A.662(16), “Performance Standards for Float-Free Release and Activation Arrangements for Emergency Radio Equipment,” adopted 19 October 1989.

(iii) Recommendation ITU-R M.632-3, “Transmission Characteristics of a Satellite Emergency Indicating Radio Beacon (Satellite EPIRB) System Operating Through Geostationary Satellites in the 1.6 GHz Band,” 1997.

(iv) IEC 61097-5, “Global maritime distress and safety system (GMDSS) – Part 5: Inmarsat-E Emergency position indicating radio beacon (EPIRB) operating through the Inmarsat system – operational and performance requirements, methods of testing and required test results,” including Annex B.

(v) The INMARSAT E-EPIRBs must also comply with § 80.1063.

(12) *Automatic Identification Systems (AIS)*: (i) ITU-R M.1371-1, “Technical characteristics for a universal shipborne automatic identification system using time division multiple access in the VHF maritime mobile band,” with Annexes, August 2001.

(ii) IMO Resolution MSC.74(69), “Adoption of new and amended performance standards, Annex 3 Recommendation on Performance Standards for Universal Shipborne Automatic Identification Systems (AIS),” adopted 12 May 1998.

(iii) IEC 61162-1, “Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners.”

(iv) IEC 61162-100, “Maritime navigation and radiocommunication equipment and systems - Digital interfaces – Part 100: Single talker and multiple listeners - Extra requirements to IEC 61162-1 for the UAIS.”

(v) IEC 61993-2, “Maritime navigation and radiocommunication equipment and systems - Automatic identification systems (AIS) – Part 2: Class A shipborne equipment of the universal automatic identification system (AIS) – Operational and performance requirements, methods of test and required test results,” with Annexes.

* * * * *

39. Section 80.1103 is amended by revising paragraphs (b) and (c) to read as follows:

§ 80.1103 Equipment authorization.

* * * * *

(b) Applicants for certification must submit with their applications measurement data sufficiently complete to ensure compliance with the technical parameters. The application must include the items listed in 47 CFR § 2.1033. Additional measurement data or information may be requested depending upon the equipment. For items not listed in § 2.1033 of this chapter, the applicant must attest that the equipment complies with performance standards as specified in § 80.1101 and, where applicable, that measurements have been made that demonstrate the necessary compliance. Submission of representative data demonstrating compliance is not required unless requested by the Commission.

(c) Applicants for verification must attest that the equipment complies with performance standards as specified in §80.1101 and, where applicable, that measurements have been made that demonstrate the necessary compliance. Submission of representative data demonstrating compliance is not required unless requested by the Commission. An application must include the items listed in §§ 2.953 and 2.955 of this chapter and a copy of the INMARSAT type-approval certification indicating that equipment meets GMDSS standards and includes all peripheral equipment associated with the specific unit under review.

* * * * *

APPENDIX C

FINAL REGULATORY FLEXIBILITY ANALYSIS

(*Second Report and Order* in WT Docket No. 00-48)

As required by the Regulatory Flexibility Act of 1980, as amended (RFA),³⁸⁸ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Further Notice of Proposed Rule Making (FNPRM)* in this proceeding.³⁸⁹ The Commission sought written public comment on the proposals in the *FNPRM*, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³⁹⁰

A. Need for, and Objectives of, the Second Report and Order

The rules adopted in the *Second Report and Order* are intended to further streamline, consolidate and clarify the Commission's Part 80 rules; remove unnecessary or duplicative requirements; address new international maritime requirements; and promote flexibility and efficiency in the use of marine radio equipment in a manner that will further maritime safety. Specifically, in the *Second Report and Order* the Commission (a) declines to create a voluntary restricted Global Maritime Distress and Safety System (GMDSS) license for recreational boaters;³⁹¹ (b) clarifies the responsibilities of VHF public coast stations that receive calls on the DSC distress frequency, Channel 70;³⁹² (c) clarifies that VHF public coast stations that are not exempt from the VHF Channel 16 watch requirement must have a radio operator on duty;³⁹³ (d) prohibits ship operation of any device capable of transmitting on a distress frequency without regulatory authorization;³⁹⁴ (e) redesignates Channels 75 and 76 for communications related to port operations, and establishes requirements for equipment to operate on the channels with reduced carrier power;³⁹⁵ (f) authorizes domestic use of INMARSAT-E emergency position indicating radiobeacons (EPIRBs) and establishes standards for such devices;³⁹⁶ (g) requires that small passenger vessels have digital selective calling capability one year after the U.S. Coast Guard (Coast Guard or USCG) declares Sea Areas A1 and A2 to be operational, and establishes additional equipment requirements for such vessels;³⁹⁷ (h) declines to specify that the qualified GMDSS operator required to be on vessels under our rules must be assigned exclusively to radio communications duties during an emergency;³⁹⁸ (i) updates the requirements for ship radio installations to incorporate new international regulations;³⁹⁹ (j) incorporates into the rules the international requirement that all passenger ships have the ability to

³⁸⁸ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

³⁸⁹ Amendment of Parts 13 and 80 of the Commission's rules Concerning Maritime Communications, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 00-48, 17 FCC Rcd 6741, 6849 (2002).

³⁹⁰ See 5 U.S.C. § 604.

³⁹¹ See paras. 12-13, *supra*.

³⁹² See paras. 15-16, *supra*.

³⁹³ See paras. 18-20, *supra*.

³⁹⁴ See para. 22, *supra*.

³⁹⁵ See para. 25, *supra*.

³⁹⁶ See paras. 30-31, *supra*.

³⁹⁷ See paras. 33-34, 36, 38-40, *supra*.

³⁹⁸ See para. 42, *supra*.

³⁹⁹ See para. 44, *supra*.

communicate with search and rescue personnel on two specified aeronautical frequencies;⁴⁰⁰ (k) determines to continue listing the carrier frequency, rather than the assigned frequency, in Part 80 Tables of Frequencies;⁴⁰¹ and (l) specifies the number of questions to be included in the GMDSS radio operator license examinations.⁴⁰²

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

No comments were submitted specifically in response to the IRFA. We note, however, that the Passenger Vessel Association (PVA) indicated that it was opposed to several of the proposed rules because of the compliance costs that would be incurred by small passenger vessel operators, many of which are small businesses. Specifically, PVA argued that the costs of compliance outweighed the safety benefits of the proposed rules requiring that the VHF and MF radios carried by small passenger vessels be upgraded to have digital selective calling (DSC) capability;⁴⁰³ that on passenger ships, at least one qualified person must be assigned to perform only radio communications duties during distress situations;⁴⁰⁴ and that passenger vessels be equipped with means for two-way on-scene radiocommunications for search and rescue purposes using the aeronautical frequencies 121.5 and 123.1 MHz.⁴⁰⁵ We have considered the potential economic impact on small entities of these rules and the other rules discussed in the IRFA, and we have considered alternatives that would reduce the potential economic impact on small entities of the rules enacted herein, regardless of whether the potential economic impact was discussed in any comments.

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁴⁰⁶ The RFA defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁴⁰⁷ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁴⁰⁸ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁴⁰⁹

Small businesses in the aviation and marine radio services use a marine very high frequency (VHF), medium frequency (MF), or high frequency (HF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, an aircraft radio, and/or any type of emergency locator transmitter

⁴⁰⁰ See para. 46, *supra*.

⁴⁰¹ See para. 49, *supra*.

⁴⁰² See para. 51, *supra*.

⁴⁰³ See para. 34, *supra*.

⁴⁰⁴ See para. 42, *supra*. We determined not to adopt this rule. *Id.*

⁴⁰⁵ See para. 46, *supra*.

⁴⁰⁶ 5 U.S.C. § 603(b)(3).

⁴⁰⁷ *Id.* § 601(6).

⁴⁰⁸ *Id.* § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” *Id.* § 601(3).

⁴⁰⁹ Small Business Act, 15 U.S.C. § 632 (1996).

(ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. For purposes of this FRFA, therefore, the applicable definition of small entity is the definition under the SBA rules applicable to wireless telecommunications. Pursuant to this definition, a “small entity” for purposes of the ship station licensees, public coast station licensees, or other marine radio users that may be affected by these rules, is any entity employing 1,500 or fewer persons. 13 C.F.R. § 121.201 (NAICS Code 517212). Since the size data provided by the Small Business Administration do not enable us to make a meaningful estimate of the number of marine radio service providers and users that are small businesses, we have used the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, which is the most recent information available. This document shows that twelve radiotelephone firms out of a total of 1,178 such firms which operated in 1992 had at least 1,000 employees. Thus, we estimate that as many as 1,166 small entities may be affected.

Some of the rules adopted herein affect VHF public coast station licensees. The Commission has defined the term “small entity” specifically applicable to public coast station licensees as any entity employing less than 1,500 persons, based on the definition under the Small Business Administration rules applicable to radiotelephone service providers. See Amendment of the Commission’s rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853, 19893 (1998) (citing 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812, now NAICS Code 513322). Since the size data provided by the Small Business Administration do not enable us to make a meaningful estimate of the number of public coast station licensees that are small businesses, we have used the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, which is the most recent information available. This document shows that twelve radiotelephone firms out of a total of 1,178 such firms which operated in 1992 had 1,000 or more employees. Thus, we estimate that no fewer than 1,166 small entities will be affected.

Some of the rules adopted herein may also affect small businesses that manufacture marine radio equipment. The Commission has not developed a definition of small entities applicable to marine radio equipment manufacturers. Therefore, the applicable definition is that for Wireless Communications Equipment Manufacturers. The SBA has established a small business size standard for radio and television broadcasting and wireless communications equipment manufacturing. Under this standard, firms are considered small if they have 750 or fewer employees.⁴¹⁰ Census Bureau data for 1997 indicate that, for that year, there were a total of 1,215 establishments⁴¹¹ in this category.⁴¹² Of those, there were 1,150 that had employment under 500, and an additional 37 that had employment of 500 to 999. The percentage of wireless equipment manufacturers in this category is approximately 61.35%,⁴¹³ so the Commission estimates that the number of wireless equipment manufacturers with employment under 500 was actually closer to 706, with an additional 23 establishments having employment of between 500 and 999. Given the above, the Commission estimates that the great majority of wireless communications equipment manufacturers are small businesses.

⁴¹⁰ 13 CFR § 121.201, NAICS code 334220.

⁴¹¹ The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 1997, which was 1,089.

⁴¹² U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Industry Statistics by Employment Size,” Table 4, NAICS code 334220 (issued August 1999).

⁴¹³ *Id.* Table 5, “Industry Statistics by Industry and Primary Product Class Specialization: 1997.”

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

In the *Second Report and Order*, we adopt several rule amendments that may affect reporting, recordkeeping and other compliance requirements for small entities.⁴¹⁴ First, we amend section 80.203 of the rules⁴¹⁵ to bar ship stations from including any device capable of transmitting on a distress frequency without regulatory authorization.⁴¹⁶ This prohibition could affect small entities that manufacture ship radio equipment. Second, we amend section 80.215(g)(3)⁴¹⁷ to require that ship station transmitters have Channels 75 and 76, and automatically reduce the carrier power to one watt or less when tuned those channels, with no manual override capability.⁴¹⁸ This new requirement could affect small entities that manufacture or use such transmitters. Third, we adopt a number of new requirements for small passenger vessels: a requirement that the VHF and MF radios already mandated by section 80.905(a) of the rules⁴¹⁹ be DSC-equipped;⁴²⁰ a requirement that the single sideband (SSB) radios required to be carried by ships operating over one hundred nautical miles from shore be DSC-equipped;⁴²¹ a requirement that the INMARSAT ship earth stations that may be carried by ships operating more than one hundred nautical miles from shore in lieu of an SSB radio be limited to specified classes of earth stations,⁴²² a requirement that vessels required to carry a SSB radio with a reserve power supply also carry a reserve power supply for the navigation receiver;⁴²³ and a requirement for updating position information.⁴²⁴ These requirements may have a direct economic impact on operators of small passenger vessels. Finally, we amend Section 80.1085 of the rules⁴²⁵ to require that every passenger ship be provided with means for two-way on-scene radiocommunications for search and rescue purposes using the aeronautical frequencies 121.5 and 123.1 MHz from the position from which the ship is normally navigated.⁴²⁶

In the IRFA accompanying the *FNPRM* in this proceeding, we specifically identified each of the above rule amendments as potentially affecting reporting, recordkeeping and other compliance

⁴¹⁴ We discuss here those rule amendments that impose new or additional requirements. We note that many of the decisions adopted in the *Second Report and Order* remove or relax existing requirements, or decline to adopt new requirements. See, e.g., paras. 12-13 (declining to establish a new licensing requirement for recreational boaters who use DSC equipment); paras. 15-16 (clarifying, *inter alia*, that VHF public coast stations do not have to maintain a Channel 70 watch); paras. 18-20 (clarifying that VHF public coast stations may engage in unattended operation on non-DSC equipment if they are exempt from the Channel 16 watch requirement); para. 30 (authorizing the use of IMARSAT-EPIRBs), para. 42 (declining to adopt a new requirement that passenger ships must have at least one qualified person assigned to perform only radio communications duties during distress situations), *supra*.

⁴¹⁵ 47 C.F.R. § 80.203.

⁴¹⁶ See para. 22, *supra*.

⁴¹⁷ 47 C.F.R. § 87.215(g)(3).

⁴¹⁸ See para. 25, *supra*.

⁴¹⁹ 47 C.F.R. § 80.905(a).

⁴²⁰ See paras. 33-34, *supra*.

⁴²¹ See para. 36, *supra*.

⁴²² See para. 38, *supra*.

⁴²³ See para. 39, *supra*.

⁴²⁴ See para. 40, *supra*.

⁴²⁵ 47 C.F.R. § 80.1085.

⁴²⁶ See para. 46, *supra*.

requirements, and specifically requested comment on the economic impact of these changes.⁴²⁷

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.”⁴²⁸

With respect to all of the rules adopted in the *Second Report and Order* that may affect reporting, recordkeeping and other compliance requirements for small entities, as identified in Section D of this FRFA, *supra*, we have considered how we might minimize the economic impact on small entities, and we have considered alternative measures that might minimize that impact. As a general matter, the alternatives considered, and in many cases adopted, include exempting small entities from the requirement; providing “grandfathering” protection from the requirement; providing a transition period to give either small entities or all affected entities additional time to come into compliance; and imposing a less burdensome requirement, either for small entities or for all affected entities. In addition, to the extent we establish here new standards for authorization of marine radio equipment, we have generally required compliance with performance standards, rather than prescribing a particular equipment design. In the IRFA accompanying the *FNPRM* in this proceeding, we specifically requested comment addressing particular alternatives that may be appropriate for particular rules proposed or discussed in the *FNPRM*.⁴²⁹ Although we received no comments specifically addressed to the IRFA, we have considered all comments to the *FNPRM* addressing the impact of any proposed change on small entities and all suggestions for alternative measures that would have a less significant impact on small entities. Moreover, even where we received no comments of this nature with regard to a particular new requirement, we considered the potential impact of the requirement on small entities, and considered alternatives. We discuss each of the specific new requirements adopted in the *Second Report and Order*, and relevant alternatives, below.

In the *Second Report and Order*, we amend section 80.203 of the rules⁴³⁰ to bar ship stations from including any device capable of transmitting on a distress frequency without regulatory authorization.⁴³¹ This rule change had been proposed by the Coast Guard, and the *FNPRM* specifically asked for comment on whether this rule change would hamper the ability of manufacturers to add tone signaling capability or to otherwise improve their equipment.⁴³² However, no manufacturer commented on this rule change, no commenter opposed it, and there is nothing in the record to indicate that it will adversely effect manufacturers. In any event, given that this rule change does not require manufacturers to add any features or capabilities to equipment, but merely prohibits what was never affirmatively authorized in the first place, there is no reason to phase in this requirement gradually. Further, there is no basis in the record to exempt manufacturers that are small entities from this requirement. Any such exemption, moreover, would jeopardize maritime safety since any unauthorized emissions on a distress frequency, from whatever source,

⁴²⁷ See *GMDSS FNPRM*, 17 FCC Rcd at 6851-52.

⁴²⁸ 5 U.S.C. § 603(c)(1)-(4).

⁴²⁹ See *GMDSS FNPRM*, 17 FCC Rcd at 6853.

⁴³⁰ 47 C.F.R. § 80.203.

⁴³¹ See para. 22, *supra*.

⁴³² See *GMDSS FNPRM*, 17 FCC Rcd at 6783, ¶ 115.

could compromise the ability of the Coast Guard to process and respond to distress signals.⁴³³

In the *Second Report and Order*, we amend section 80.215(g)(3)⁴³⁴ to require that ship station transmitters have Channels 75 and 76, and automatically reduce the carrier power to one watt or less when tuned those channels, with no manual override capability.⁴³⁵ In the *FNPRM*, the Commission expressed concern about the impact of this rule on manufacturers, and specifically solicited comment on appropriate grandfathering protection if the new requirements are adopted.⁴³⁶ No manufacturer commented on the proposed equipment requirements relating to Channels 75 and 76, and no one opposed such requirements. The only commenter responding to the Commission's request for input on appropriate grandfathering protection was the Coast Guard, which stated simply that it supports grandfathering protection of some sort.⁴³⁷ Notwithstanding the absence of comment on this issue from manufacturers or vessel operators, we have provided both grandfathering protection for existing installed equipment and a transitional period before new installations have to comply with the new requirements. Specifically, non-compliant equipment installed prior to the effective date of these rules is grandfathered indefinitely, so that it may continue to be used for its remaining useful life.⁴³⁸ In addition, we are allowing installations of non-compliant equipment until one year after the effective date of the *Second Report and Order*.⁴³⁹ We believe these actions will effectively minimize the compliance burden of this requirement on manufacturers and ship station licensees, especially any affected small entities. Given that no manufacturers commented on these rules, we do not believe this approach will leave manufacturers with stranded inventory. We decline to exempt small entities from these requirements because the benefits of designating Channels 75 and 76 for port operations, and the associated equipment requirements, cannot be fully realized unless access to Channels 75 and 76 is ubiquitous, and because there is nothing in the record of this proceeding to suggest a need for such an exemption, especially given the grandfathering and transition provisions we have adopted.

In the *Second Report and Order*, we adopt a requirement that the VHF and MF radios already mandated by section 80.905(a) of the rules⁴⁴⁰ be DSC-equipped.⁴⁴¹ The Passenger Vessel Association (PVA) filed comments opposing this requirement. PVA contends that small passenger vessels that are not subject to GMDSS requirements under SOLAS should not be required to meet GMDSS-derived equipment requirements such as this.⁴⁴² PVA further asserts that many of the vessel operators that will be affected by this requirement are small businesses,⁴⁴³ and suggested that, instead of eliminating or tightening the exemption, the Commission should broaden the exemption to cover all passenger-carrying vessels, irrespective of size, that operate in protected waterways, such as harbors, bays and waterways covered by

⁴³³ See para. 22, *supra*. We note that this rule change only pertains to the standards that equipment must meet in order to be authorized by the Commission. It does not prohibit the use of any existing equipment already installed on vessels, and thus should not impact ship station licensees. See § 80.203(m)(6) in Appendix B, *supra*.

⁴³⁴ 47 C.F.R. § 87.215(g)(3).

⁴³⁵ See para. 25, *supra*.

⁴³⁶ See *GMDSS FNPRM*, 17 FCC Rcd at 6784, ¶ 118.

⁴³⁷ See note 94, *supra* (citing USCG Comments (WT 00-48) at 4-5).

⁴³⁸ See para. 25, *supra*.

⁴³⁹ *Id.*

⁴⁴⁰ 47 C.F.R. § 80.905(a).

⁴⁴¹ See paras. 33-34, *supra*.

⁴⁴² See para. 34, *supra* (citing PVA Comments at 1).

⁴⁴³ See note 137, *supra* (citing PVA Comments at 1). PVA does not provide any statistics or other evidence in support of this claim.

Vessel Traffic Systems.⁴⁴⁴ We decline to exempt any class of vessels otherwise subject to section 80.905(a) from the new DSC requirement, even with respect to vessels owned and operated by small businesses and/or restricted to voyages in particular inland or coastal waterways. We agree with the Coast Guard and the GMDSS Task Force that the public safety benefits of imposing this requirement on small passenger vessels are paramount. DSC represents an important enhancement of maritime safety, and requiring DSC capability in small passenger vessels, even those limited to voyages on protected waterways, will provide safety benefits not only to the passengers and crew on such vessels, but to all GMDSS participating vessels. We also believe, moreover, that the compliance costs of this requirement will not be significant because, pursuant to section 80.203(n) of the Commission's rules,⁴⁴⁵ the Commission already requires that all VHF and MF marine radio transmitters submitted for equipment authorization have DSC capability. In fact, the DSC requirement has applied to all VHF and MF marine radio transmitters submitted for equipment authorization since June 17, 1999.⁴⁴⁶ As a consequence of this requirement, more and more of the new equipment available in the market will be DSC-capable. In addition, as a means to minimize whatever compliance costs are incurred by small passenger vessel operators, we have decided to defer the compliance deadline for this requirement. We will not require that VHF radios be upgraded to DSC until one year after the Coast Guard declares Sea Area A1 to be operational, and we will not require that MF radios be upgraded to DSC until one year after the Coast Guard declares Sea Area A2 to be operational.⁴⁴⁷ This compliance deadline is sufficiently far off that it will give affected small passenger vessel operators ample time to plan and budget for the required upgrades. In addition, as the deadline for compliance extends further into the future, it is likely that there will be fewer non-DSC transmitters in manufacturers' and retailers' inventory (because of the DSC requirement in section 80.203(n)), and we therefore expect that most new VHF and MF radio equipment available in the market during the time period immediately preceding the compliance deadline will have DSC capability, further minimizing the economic impact on small entities.

In the *Second Report and Order*, we adopt a requirement that the SSB radios required of ships operating over one hundred nautical miles from shore, pursuant to section 80.905,⁴⁴⁸ be DSC-equipped.⁴⁴⁹ The Coast Guard was the only party directly commenting on this issue, and it stated that, as in the case of VHF and MF radio equipment, requiring DSC capabilities in SSB radios will provide significant safety advantages over non-DSC equipment.⁴⁵⁰ No party opposed this requirement or attempted to quantify the compliance costs. On this record, then, we believe considerations of maritime safety should be given paramount weight. Indeed, given that the subject vessels by definition operate more than one hundred nautical miles from shore, the safety benefits of this requirement are even greater than those we have adopted for VHF and MF radios in vessels that do not operate so far from shore. Significantly, DSC capability will enhance the ability of passenger vessels on such voyages to contact nearby ships as well as shore facilities. Although we decline to exempt small passenger vessel operators that qualify as small entities from this DSC requirement, we have determined to give affected parties until one year after the effective date of the *Second Report and Order* before requiring compliance. We believe this reasonably fulfills the objective of minimizing compliance costs for small entities without compromising the objective of promoting public safety on the high seas. We do not hinge the compliance deadline in this case on the timing of the Coast Guard's declaration of Sea Area A1 or Sea Area A2 because vessels

⁴⁴⁴ *Id.*

⁴⁴⁵ 47 C.F.R. § 80.203(n).

⁴⁴⁶ *Id.*

⁴⁴⁷ See para. 34, *supra*. Some safety benefits of VHF-DSC radio and MF-DSC radio equipment can be realized immediately, but the full safety benefits of VHF-DSC and MF-DSC will not accrue until deployment of the shore-based facilities for Sea Area A1 coverage and Sea Area A2 coverage, respectively.

⁴⁴⁸ See 47 C.F.R. § 80.905(a)(3)(iii)(A), 4(iii)(A).

⁴⁴⁹ See para. 36, *supra*.

⁴⁵⁰ *Id.* (citing USCG Comments (WT 00-48) at 7).

operating more than one hundred nautical miles from shore are operating in Sea Area A3.

In the *Second Report and Order*, we adopt a requirement that the INMARSAT ship earth stations that may be carried by ships operating more than one hundred nautical miles from shore in lieu of an SSB radio, pursuant to section 80.905,⁴⁵¹ be limited to specified classes of earth stations.⁴⁵² We do not believe this requirement should have a significant impact on any small entities. No commenter opposed this proposal. In addition, we note that the rule merely *permits* the use of an INMARSAT earth station as an alternative to other equipment, rather than mandating the use of an INMARSAT earth station in all instances. Nonetheless, we have decided to relax the requirement, as it was proposed in the *FNPRM*,⁴⁵³ by adding the INMARSAT Mini-M to the list of approved earth stations.⁴⁵⁴ As thus revised, we believe the adopted rule represents a reasonable compromise between tightening the existing rule for safety reasons while according a fair measure of flexibility to small passenger vessel operators, especially small entities, in selecting an earth station that will be deemed suitable to obviate the need for an SSB radio.

In the *Second Report and Order*, we extend the current section 80.905 SSB reserve power supply requirement⁴⁵⁵ to the navigation receiver.⁴⁵⁶ No party has opposed this proposal or provided information that would permit a quantification of estimated compliance costs. The Coast Guard, the only commenter on this issue, urges adoption of the requirement because of the safety benefits. We agree with the Coast Guard. Since this rule merely extends an existing reserve power supply requirement to an additional piece of equipment, and there have been no comments in opposition to this proposal, we see no basis for exempting small entities from this requirement or providing an extended implementation period.

In the *Second Report and Order*, we adopt a new requirement specifying that vessels subject to section 80.905 must comply with the requirement in section 80.1085(c)⁴⁵⁷ for updating position information.⁴⁵⁸ In discussing the proposal for this rule in the *FNPRM*, the Commission observed that its adoption would impose a GMDSS requirement on small passenger vessels.⁴⁵⁹ The only party commenting on this matter was the Coast Guard, which reiterated its support for this requirement because it will enable the Coast Guard to locate mariners in a more timely manner and better utilize its limited resources.⁴⁶⁰ No party opposed this requirement, and the record is devoid of information as to the costs of compliance. Accordingly, we find no basis in the record to exempt some small passenger vessels from this requirement or to delay its implementation through a phased-in schedule.

⁴⁵¹ See 47 C.F.R. § 80.905(a)(3)(iii)(B), 4(iii)(B).

⁴⁵² See para. 38, *supra*.

⁴⁵³ See *GMDSS FNPRM*, 17 FCC Rcd at 6787, ¶ 124.

⁴⁵⁴ See para. 38, *supra*. In the *FNPRM*, we proposed to permit only INMARSAT A (existing units only), B, and C earth stations. See *GMDSS FNPRM*, 17 FCC Rcd at 6787, ¶ 124.

⁴⁵⁵ See 47 C.F.R. § 80.905(a)(3)(iv), (4)(iv).

⁴⁵⁶ See para. 39, *supra*.

⁴⁵⁷ 47 C.F.R. § 80.1085(c). Section 80.1085(c) states: “All GMDSS equipment capable of transmitting an automatic distress alert which includes position of the ship must have either an integral navigation receiver or capability of being connected to an external navigation receiver. If an external navigation receiver is installed, it shall be connected to all of the alerting devices referred to above. If there is no navigation receiver, the position must be entered manually for each alerting device at least once every 4 hours (at the change of the navigation watch).”

⁴⁵⁸ See para. 40, *supra*.

⁴⁵⁹ See *GMDSS FNPRM*, 17 FCC Rcd at 6787, ¶ 125.

⁴⁶⁰ See para. 40 & n.160, *supra* (citing USCG Comments (WT 00-48) at 7.

Finally, in the *Second Report and Order*, we amend section 80.1085 of the rules⁴⁶¹ to require that every passenger ship be provided with means for two-way on-scene radiocommunications for search and rescue purposes using the aeronautical frequencies 121.5 and 123.1 MHz from the position from which the ship is normally navigated.⁴⁶² PVA argues that a requirement for on-scene radios with aeronautical frequencies is expensive and is not useful outside of open ocean environments.⁴⁶³ It urges that this requirement not be imposed upon passenger vessels operating in or near coastal, inland, and other protected waters.⁴⁶⁴ More broadly, PVA complains that the USCG's proposals in this proceeding indicate that the USCG is seeking to extend equipment requirements that are justified for vessels in open-ocean service to vessels on domestic voyages.⁴⁶⁵ We agree with PVA that equipment requirements that make sense for vessels on the open ocean should not be extended without further analysis to vessels that stay closer to shore. However, we disagree with PVA that an on-scene capability for two-way radiocommunications with aircraft using the aeronautical frequencies 121.5 and 123.1 MHz offers no potential safety benefits to vessels on domestic voyages. We believe that the ability to communicate with helicopters or other aircraft involved in search and rescue operations could save lives where, for example, a passenger vessel catches fire and is exuding thick smoke on an inland waterway. We further believe that these safety benefits militate against exempting certain vessels from this requirement, based either on the operator's small business status or the restriction of the vessel to inland or protected waterways, or a combination of both factors. Additionally, we do not believe that adopting this requirement in the Part 80 rules imposes a new compliance cost on passenger vessels since the requirement was imposed internationally under SOLAS well before the release of this order. Moreover, because the safety benefits of this requirement are not dependent on GMDSS implementation, and because passenger vessels are already required to have this capability under SOLAS, we see no reason to defer the effective date of this requirement to one year after Sea Area A1 or Sea Area A2 implementation, as we have done with some of the other requirements adopted herein in the interest of reducing compliance costs.⁴⁶⁶ However, we believe it is appropriate to defer the effective date for this requirement for some shorter period in order to mitigate the compliance costs for small passenger vessel operators. Accordingly, we will make this requirement effective six months after the effective date of the *Second Report and Order*.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

None.

⁴⁶¹ 47 C.F.R. § 80.1085.

⁴⁶² See para. 46, *supra*.

⁴⁶³ PVA Comments at 2.

⁴⁶⁴ *Id.*

⁴⁶⁵ *Id.*

⁴⁶⁶ See para. 34, *supra*.

Report to Congress: The Commission will send a copy of the *Second Report and Order* in WT Docket No. 00-48, including the Final Regulatory Flexibility Analysis, in a report to be sent to Congress pursuant to the Congressional Review Act.⁴⁶⁷ In addition, the Commission will send a copy of the *Second Report and Order* in WTB Docket No. 00-48, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the SBA. A copy of the *Second Report and Order* in WT Docket No. 00-48 and the Final Regulatory Flexibility Analysis (or summaries thereof) will also be published in the Federal Register.⁴⁶⁸

⁴⁶⁷ See 5 U.S.C. § 801(a)(1)(A).

⁴⁶⁸ See *id.* § 604(b).

APPENDIX D

FINAL REGULATORY FLEXIBILITY ANALYSIS

(*Sixth Report and Order* in PR Docket No. 92-257)

As required by the Regulatory Flexibility Act of 1980, as amended (RFA),⁴⁶⁹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Fourth Further Notice of Proposed Rule Making* (4th FNPRM) in this proceeding.⁴⁷⁰ The Commission sought written public comment on the proposals in the 4th FNPRM, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.⁴⁷¹

A. Need for, and Objectives of, the Sixth Report and Order

103. The rules adopted in the *Sixth Report and Order* are intended to further streamline, consolidate and clarify the Commission's Part 80 rules governing VHF public coast (VPC) stations; remove unnecessary or duplicative requirements; address new international maritime requirements; and promote flexibility and efficiency in the use of marine radio equipment in a manner that will further maritime safety. Specifically, in the *Sixth Report and Order* the Commission (a) clarifies the responsibilities of VPC stations as to when they must maintain a watch on the Channel 16 distress frequency and as to their obligation to notify the Coast Guard of a station relocation;⁴⁷² (b) generally declines to impose additional technical requirements for VPC stations operating on offset channels;⁴⁷³ (c) denies a request that nine channel pairs now allocated for public safety and other private land mobile radio operations be reallocated for use by VPC stations;⁴⁷⁴ (d) adopts new rules to govern the implementation of Automatic Identification Systems;⁴⁷⁵ (e) establishes a new emission mask in Part 80 to accommodate a wide range of data services;⁴⁷⁶ (f) eliminates the station identification requirement for VPC stations licensed on a geographic area basis;⁴⁷⁷ (g) authorizes VPC stations to maintain required station records in electronic form;⁴⁷⁸ (h) relaxes the posting requirement for VPC stations;⁴⁷⁹ and (i) provides a clarification in the rules that VPC stations, like other providers of commercial mobile radio services, have been relieved of certain filing requirements as a matter of forbearance.⁴⁸⁰

⁴⁶⁹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁴⁷⁰ Amendment of the Commission's rules Concerning Maritime Communications, *Fourth Further Notice of Proposed Rule Making*, PR Docket No. 92-257, 17 FCC Rcd 227, 243 (2001).

⁴⁷¹ See 5 U.S.C. § 604.

⁴⁷² See paras. 55-57, *supra*.

⁴⁷³ See paras. 60-61, *supra*.

⁴⁷⁴ See para. 63, *supra*.

⁴⁷⁵ See paras. 66-67, *supra*.

⁴⁷⁶ See para. 69, *supra*.

⁴⁷⁷ See para. 72, *supra*.

⁴⁷⁸ See para. 75, *supra*.

⁴⁷⁹ See para. 76, *supra*.

⁴⁸⁰ See para. 78, *supra*.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

No comments were submitted specifically in response to the IRFA. Nonetheless, we have considered the potential economic impact on small entities of the rules discussed in the IRFA, and we have considered alternatives that would reduce the potential economic impact on small entities of the rules enacted herein.

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁴⁸¹ The RFA defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁴⁸² In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁴⁸³ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁴⁸⁴

Small businesses in the aviation and marine radio services use a marine very high frequency (VHF), medium frequency (MF), or high frequency (HF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, an aircraft radio, and/or any type of emergency locator transmitter (ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. For purposes of this FRFA, therefore, the applicable definition of small entity is the definition under the SBA rules applicable to wireless telecommunications. Pursuant to this definition, a “small entity” for purposes of the ship station licensees, public coast station licensees, or other marine radio users that may be affected by these rules, is any entity employing 1,500 or fewer persons. 13 C.F.R. § 121.201 (NAICS Code 517212). Since the size data provided by the Small Business Administration do not enable us to make a meaningful estimate of the number of marine radio service providers and users that are small businesses, we have used the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, which is the most recent information available. This document shows that twelve radiotelephone firms out of a total of 1,178 such firms which operated in 1992 had at least 1,000 employees. Thus, we estimate that as many as 1,166 small entities may be affected.

Some of the rules adopted herein affect VHF public coast station licensees. The Commission has defined the term “small entity” specifically applicable to public coast station licensees as any entity employing less than 1,500 persons, based on the definition under the Small Business Administration rules applicable to radiotelephone service providers. See Amendment of the Commission’s Rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853, 19893 (1998) (citing 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812, now NAICS Code 517212). Since the size data provided by the Small Business Administration do not enable us to make a meaningful estimate of the number of public coast station licensees that are small businesses, we have used the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, which is the most recent information available. This document shows that twelve

⁴⁸¹ 5 U.S.C. § 604(a)(3).

⁴⁸² *Id.* § 601(6).

⁴⁸³ *Id.* § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” 5 U.S.C. § 601(3).

⁴⁸⁴ Small Business Act, 15 U.S.C. § 632 (1996).

radiotelephone firms out of a total of 1,178 such firms which operated in 1992 had 1,000 or more employees. Thus, we estimate that no fewer than 1,166 small entities will be affected.

Some of the rules adopted herein may also affect small businesses that manufacture marine radio equipment. The Commission has not developed a definition of small entities applicable to marine radio equipment manufacturers. Therefore, the applicable definition is that for Wireless Communications Equipment Manufacturers. The SBA has established a small business size standard for radio and television broadcasting and wireless communications equipment manufacturing. Under this standard, firms are considered small if they have 750 or fewer employees.⁴⁸⁵ Census Bureau data for 1997 indicate that, for that year, there were a total of 1,215 establishments⁴⁸⁶ in this category.⁴⁸⁷ Of those, there were 1,150 that had employment under 500, and an additional 37 that had employment of 500 to 999. The percentage of wireless equipment manufacturers in this category is approximately 61.35%,⁴⁸⁸ so the Commission estimates that the number of wireless equipment manufacturers with employment under 500 was actually closer to 706, with an additional 23 establishments having employment of between 500 and 999. Given the above, the Commission estimates that the great majority of wireless communications equipment manufacturers are small businesses.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

The *Sixth Report and Order* does not impose any additional reporting, recordkeeping, or other compliance requirements on small entities. The rule amendments adopted in the *Sixth Report and Order* generally relieve VPC station licensees of existing requirements or relax those requirements.⁴⁸⁹ The *Sixth Report and Order* does amend section 80.302(a) of the Commission's rules⁴⁹⁰ to expressly mandate that VPC licensees subject to a Channel 16 watch requirement must notify the Coast Guard as soon as practicable of a relocation of the station.⁴⁹¹ This requirement was not opposed by any party. In fact, the only parties commenting on the issue – the Coast Guard and a VPC licensee – urged the Commission to adopt this rule change. Accordingly, we do not believe this requirement will have a direct and significant economic impact on any small entities or, for that matter, any entities at all. In any event, and as we state in the *Sixth Report and Order*,⁴⁹² this is not a *new* or *additional* requirement. Prior to the amendment adopted herein, section 80.302(a) specified that a VPC licensee subject to the watch requirement must notify the Coast Guard as soon as practicable when there is any change in the operation of the station that

⁴⁸⁵ 13 CFR § 121.201, NAICS code 334220.

⁴⁸⁶ The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical locations for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 1997, which was 1,089.

⁴⁸⁷ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Industry Statistics by Employment Size,” Table 4, NAICS code 334220 (issued August 1999).

⁴⁸⁸ *Id.* Table 5, “Industry Statistics by Industry and Primary Product Class Specialization: 1997.”

⁴⁸⁹ *See, e.g.*, para. 69 (establishing an emission mask that will permit VPC licensees to offer a full range of data services); para. 72 (relieving geographical area VPC licensees of station identification requirements); para. 75 (permitting VPC licensees to maintain required records in electronic form if they so choose); para. 76 (relaxing the posting requirement for VPC stations); and para. 78 (amending the rules to clarify that VPC licensees are no longer subject to certain filing requirements because the Commission has determined to forbear from enforcing those requirements against commercial mobile radio service providers), *supra*.

⁴⁹⁰ 47 C.F.R. § 80.302(a).

⁴⁹¹ *See* para. 56, *supra*.

⁴⁹² *Id.*

would result in a “discontinuance, reduction or suspension” of the watch.⁴⁹³ We believe this language already encompassed a requirement to notify the Coast Guard of a relocation of the watch, and we have amended the rule only to clarify the point, as requested by the commenters.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.”⁴⁹⁴

As explained in Section D of this FRFA, *supra*, the *Sixth Report and Order* does not impose any additional reporting, recordkeeping, or other compliance requirements on small entities. The rule amendments adopted in the *Sixth Report and Order* generally relieve VPC station licensees of existing requirements or relax those requirements.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

None.

Report to Congress: The Commission will send a copy of the *Sixth Report and Order* in PR Docket No. 92-257, including the Final Regulatory Flexibility Analysis, in a report to be sent to Congress pursuant to the Congressional Review Act.⁴⁹⁵ In addition, the Commission will send a copy of the *Sixth Report and Order* in PR Docket No. 92-257, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the SBA. A copy of the *Sixth Report and Order* in PR Docket No. 92-257 and the Final Regulatory Flexibility Analysis (or summaries thereof) will also be published in the Federal Register.⁴⁹⁶

⁴⁹³ 47 C.F.R. § 80.302(a).

⁴⁹⁴ 5 U.S.C. § 603(c)(1)-(4).

⁴⁹⁵ *See id.* § 801(a)(1)(A).

⁴⁹⁶ *See id.* § 604(b).

APPENDIX E

INITIAL REGULATORY FLEXIBILITY ANALYSIS

(*Second Further Notice of Proposed Rule Making* in WT Docket No. 00-48)

As required by the Regulatory Flexibility Act (RFA),⁴⁹⁷ the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in the *Second Further Notice of Proposed Rule Making* in WT Docket No. 00-48 (2nd FNPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the 2nd FNPRM as provided in paragraph 91 of the item. The Commission will send a copy of the 2nd FNPRM, including the IRFA, to the Chief Counsel for Advocacy of the U.S. Small Business Administration.⁴⁹⁸ In addition, the 2nd FNPRM and IRFA (or summaries thereof) will be published in the Federal Register.⁴⁹⁹

A. Need for, and Objectives of, the Proposed Rules

In the 2nd FNPRM, we seek comment on rule amendments that are intended to enhance maritime safety, promote the efficient use of the maritime radio spectrum, and, to the extent consistent with these first two objectives, remove unnecessary regulatory burdens. We also seek to conform the Commission's Part 80 rules with international standards where doing so will not undermine domestic regulatory objectives. In the 2nd FNPRM, we first request comment on whether we should adopt new requirements for digital selective calling equipment that conform to recently adopted international standards for such equipment.⁵⁰⁰ Second, we invite comment on whether to augment the list of ship earth stations approved for use in lieu of a single sideband radio. Specifically, we invite comment on whether to add the INMARSAT F-77 ship earth station to the list.⁵⁰¹ Next, we seek comment on a recommendation by the National Transportation Safety Board to require that all small passenger vessels have a reserve power source.⁵⁰² In addition, we ask interested parties to consider whether we should make certain commercial radio operator licenses and permits valid for the lifetime of the holder, obviating the need for such licensees to file periodic renewal applications.⁵⁰³ We also ask for comment on whether we should introduce greater flexibility into the examination process by removing rule provisions that codify the number of questions for each examination element and that require the exclusive use of new question pools immediately upon their public availability.⁵⁰⁴ In addition, we request comment to assist us in crafting rules to guide the industry in making communications equipment that will meet the functional needs of the Ship Security Alert System.⁵⁰⁵ We also invite recommendations for further updating of Part 80 of our rules in response to recent changes in international standards, and specifically request comment on whether certain on-board frequencies should be authorized for narrowband use domestically, as they

⁴⁹⁷ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601 *et. seq.*, has been amended by the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAA). Title II of the CWAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

⁴⁹⁸ *Id.* § 603(a).

⁴⁹⁹ *See id.*

⁵⁰⁰ *See* para. 79, *supra*.

⁵⁰¹ *See* para. 80, *supra*.

⁵⁰² *See* paras. 81-82, *supra*.

⁵⁰³ *See* para. 83, *supra*.

⁵⁰⁴ *See* para. 84, *supra*.

⁵⁰⁵ *See* para. 85, *supra*.

are internationally.⁵⁰⁶ Finally, we request comment on suggestions by both Globe Wireless and the Commission that certain regulatory provisions have become outdated, and therefore should be revised or eliminated.⁵⁰⁷

B. Legal Basis for Proposed Rules

The proposed action is authorized under sections 1, 4(i), 302, 303(f) and (r), and 332 of the Communications Act of 1934, as amended, 47 U.S.C. 1, 154(i), 302, 303(f) and (r), and 332.

C. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁵⁰⁸ The RFA defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁵⁰⁹ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁵¹⁰ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁵¹¹ A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”⁵¹² Nationwide, as of 1992, there were approximately 275,801 small organizations.⁵¹³ “Small governmental jurisdiction”⁵¹⁴ generally means “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000.”⁵¹⁵ As of 1992, there were approximately 85,006 governmental entities in the United States.⁵¹⁶ This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96%, have populations of fewer than 50,000.⁵¹⁷ The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (96%) are small entities. Below, we further describe and estimate the number of small entity licensees and regulatees that may be affected by adoption of rules discussed in the 2nd FNPRM.

⁵⁰⁶ See para. 86, *supra*.

⁵⁰⁷ See paras. 87-88, *supra*.

⁵⁰⁸ 5 U.S.C. § 603(b)(3).

⁵⁰⁹ 5 U.S.C. § 601(6).

⁵¹⁰ 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” 5 U.S.C. § 601(3).

⁵¹¹ Small Business Act, 15 U.S.C. § 632 (1996).

⁵¹² 5 U.S.C. § 601(4).

⁵¹³ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

⁵¹⁴ 47 C.F.R. § 1.1162.

⁵¹⁵ 5 U.S.C. § 601(5).

⁵¹⁶ U.S. Dept. of Commerce, Bureau of the Census, “1992 Census of Governments.”

⁵¹⁷ *Id.*

Small businesses in the aviation and marine radio services use a marine very high frequency (VHF), medium frequency (MF), or high frequency (HF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, an aircraft radio, and/or any type of emergency locator transmitter (ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. For purposes of this IRFA, therefore, the applicable definition of small entity is the definition under the SBA rules applicable to wireless telecommunications. Pursuant to this definition, a “small entity” for purposes of the ship station licensees, public coast station licensees, or other marine radio users that may be affected by these rules, is any entity employing 1,500 or fewer persons. 13 C.F.R. § 121.201 (NAICS Code 517212). Since the size data provided by the Small Business Administration do not enable us to make a meaningful estimate of the number of marine radio service providers and users that are small businesses, we have used the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, which is the most recent information available. This document shows that twelve radiotelephone firms out of a total of 1,178 such firms which operated in 1992 had at least 1,000 employees. Thus, we estimate that as many as 1,166 small entities may be affected. We invite comment on whether this is the correct definition to use in this context. We note in this regard that one of the discussed rule changes would affect small passenger vessels, and the Passenger Vessel Association has stated in comments in this proceeding that the vast majority of U.S. passenger vessel operating companies are small businesses.⁵¹⁸ We accordingly request commenters to consider whether the number of small passenger vessel operators potentially affected by the rule is not fully reflected in the above definition and estimate. In keeping with the spirit of the RFA, we choose to err, if at all, on the side of overestimating the number of small entities potentially affected by these rules.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

We believe two of the possible rule changes discussed in the 2nd FNPRM may potentially have a direct, significant economic impact on a substantial number of small entities.⁵¹⁹ As noted, we have requested comment on whether to impose new requirements on digital selective calling equipment in conformity with recently adopted international standards for such equipment.⁵²⁰ We invite interested parties to address the economic impact of the new requirements on small vessel operators and other small businesses that may be subject to the requirements. It is our tentative conclusion that mandating compliance with the new requirements will benefit maritime safety. We seek information on whether the compliance costs may outweigh the safety benefits of these requirements, and whether there are alternative means of securing the safety benefits of these requirements through means that are less burdensome to regulatees.

In addition, we have requested comment on a NTSB recommendation that the Commission amend its rules to require that small passenger vessels have VHF radiotelephone communications systems

⁵¹⁸ See note 137, *supra* (citing PVA Comments at 1).

⁵¹⁹ We believe the discussed rules concerning commercial radio operator licensing examinations would not impose any new reporting, recordkeeping, or other compliance requirement on any regulated entity. An extension of the license terms of certain radio operator licenses, to the lifetime of the license holder, would benefit those licensees by eliminating the cost and paperwork burden of filing periodic license renewal applications. The other specific rule changes under consideration would simply provide a transition period before use of a new question pool became mandatory, and make it easier to change the number of questions that have to be included on a particular examination. We do not anticipate that either of these rule changes would have a significant or direct economic impact on any entity, and that whatever slight impact they do have would be economically beneficial. Finally, our request for interested parties to suggest whether certain rules should be updated to reflect changes in international standards is so open-ended that the impact of any responsive proposals cannot be predicted at this stage. We recognize, of course, that we may need to augment our regulatory flexibility analysis with respect to specific proposals that we receive from commenters.

⁵²⁰ See para. 79, *supra*.

on board that can operate even when the vessel loses power.⁵²¹ Currently, section 80.917 of the Commission's rules imposes a requirement on vessels of more than 100 gross tons to have a reserve power supply.⁵²² Adoption of the NTSB recommendation would in effect remove the tonnage limitation from section 80.917, and impose the reserve power supply requirement on all passenger vessels, regardless of size. The NTSB states that imposing the reserve power supply requirement on all small passenger vessels will prevent accidents and save lives.⁵²³ Imposition of such a requirement would likely require small passenger vessel operators, including small passenger vessel operators that are small entities, to purchase and install additional equipment on their vessels. The record in this proceeding does not indicate the estimated cost of such equipment or the estimated overall costs of compliance with such a requirement. In the 2nd FNPRM, we specifically ask commenters to provide information on the costs to small vessel operators of complying with such a requirement,⁵²⁴ and we reiterate that request here.

We do not believe any of the other matters discussed in the 2nd FNPRM would have a direct, significant economic impact on a substantial number of small entities. However, any commenters that disagree with that tentative conclusion are asked to explain the basis of that disagreement.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.⁵²⁵

In the 2nd FNPRM, we request comment on whether to incorporate into the Commission's rules newly adopted international standards for digital selective calling equipment. We describe here, and seek comment on, possible alternatives to imposing these new requirements that might minimize the economic impact on small entities. First, we ask commenters to consider whether it would be appropriate to exempt small businesses from any additional requirements for digital selective calling equipment that may be adopted. Commenters advocating such an exemption should propose criteria for identifying entities that should be exempt, and should explain why they believe such an exemption represents a reasonable compromise between the goals of promoting maritime safety and minimizing compliance costs for small entities. In addition, if we do determine to impose new requirements on digital selective calling equipment, we would consider whether we should grandfather some vessels from the requirement, either indefinitely or for a specified term of years, or whether there should be a phased-in schedule for compliance, with possibly different compliance timetables for vessels based, possibly, on vessel size or on whether the vessel operator is a small business. Interested parties should address these alternatives. Finally, we seek comment on whether an alternative equipment requirement, less costly to small passenger vessel operators, could provide the same or similar safety benefits as the international standards. Proponents of such an alternative requirement should compare the estimated costs of complying with the international digital selective calling equipment standards with the estimated costs of complying with the proposed alternative, and explain why they believe the proposed alternative will be

⁵²¹ See paras. 81-82, *supra*.

⁵²² 47 C.F.R. § 80.917.

⁵²³ See para. 81 & note 353, *supra*.

⁵²⁴ See para. 82, *supra*.

⁵²⁵ See 5 U.S.C. § 603(c).

adequate to address safety concerns. Commenters are also invited to suggest alternatives other than those discussed here.

In the 2nd FNPRM, we also invite comment on an NTSB recommendation to require that small passenger vessels, regardless of size, have VHF radiotelephone communications systems on board that can operate even when the vessel loses power. We tentatively conclude that the most direct way of imposing such a requirement is removing the tonnage limitation in section 80.917, which now exempts vessels of 100 gross tons or less from an otherwise applicable reserve power supply requirement. However, we also specifically ask interested parties to recommend other means of addressing the safety needs of small vessel operators, crewmembers, and passengers, either as alternatives to the NTSB recommendation or as supplementary measures.⁵²⁶

We describe here, and seek comment on, possible alternatives to the NTSB recommendation that might minimize the economic impact on small entities. First, we ask commenters to consider whether the reserve power supply requirement should be expanded only to a subset of additional small passenger vessels rather than to all small passenger vessels. For example, instead of eliminating the tonnage limitation in current section 80.917, we might simply lower the threshold. Commenters advocating a lowered tonnage threshold should recommend a specific threshold and explain why they believe it represents a reasonable compromise between the goals of promoting maritime safety and minimizing compliance costs for small entities. Alternatively, we could restrict the applicability of the reserve power supply requirement based on the size of the small passenger vessel operator, perhaps exempting only those small passenger vessel operators that meet the statutory definition of a small business. Commenters advocating such an approach should explain, *inter alia*, if it might result in exempting certain vessels exceeding 100 gross tons that are now fully subject to the reserve power supply requirement, and the ramifications of such an exemption for maritime safety. In addition, we might consider providing a continuing exemption for vessels below a certain size, or owned by a small business, that operate only in protected inland waterways.⁵²⁷ If we do determine to impose a reserve power supply requirement on all small passenger vessels, we would consider whether we should grandfather some vessels from the requirement, either indefinitely or for a specified term of years, or whether there should be a phased-in schedule for compliance, with possibly different compliance timetables for vessels based, possibly, on vessel size or on whether the vessel operator is a small business. Interested parties should address these alternatives. Finally, we seek comment on whether an alternative equipment requirement, less costly to small passenger vessel operators, could provide the same or similar safety benefits as a reserve power supply requirement. Proponents of such an alternative requirement should compare the estimated compliance costs of the reserve power supply requirement with the estimated compliance costs of the proposed alternative, and explain why they believe the proposed alternative will be adequate to address safety concerns.⁵²⁸ Commenters are also invited to suggest alternatives other than those discussed here.

⁵²⁶ See para. 82, *supra*.

⁵²⁷ However, we observe that the particular incident that prompted the NTSB recommendation was a fire on board a small passenger vessel on a commuter run in the Hudson River. See para. 81, *supra*.

⁵²⁸ We note that Section 80.917 not only requires a reserve power supply but also specifies certain criteria relating to, for example, location and accessibility, overload protection, charging of storage batteries, and engine cooling.
(continued...)

F. Federal Rules that May Duplicate, Overlap, or Conflict With the Proposed Rules

None.

(...continued from previous page)

See 47 C.F.R. § 80.917(b)-(g). Commenters may propose, as alternatives minimizing the costs to small entities, either a requirement for less costly equipment in lieu of a reserve power supply, or a relaxation of the criteria applicable to the reserve power supply.

APPENDIX F

Glossary of Acronyms

AIS	Automatic Identification Systems
ATMS	Automated Maritime Telecommunications System
CMRS	Commercial mobile radio services
COLEM	Commercial Operator License Examination Manager
DSC	Digital selective calling
EPIRB	Emergency position indicating radiobeacon
GMDSS	Global Maritime Distress and Safety System
IEC	International Electrotechnical Commission
IMO	International Maritime Organization
ISO	International Standards Organization
ITU	International Telecommunication Union
NTSB	National Transportation Safety Board
PAWSS	Ports and Waterways Safety System
PSTN	Public switched telephone network
RTCM	Radio Technical Commission for Maritime Services
SOLAS	International Convention for the Safety of Life at Sea
SSB	Single sideband
STCW	Standards of Training, Certification and Watchkeeping Convention
ULS	Universal Licensing System
USCG	United States Coast Guard
USPS	United States Power Squadrons
VPC	VHF public coast station
VTS	Vessel Traffic Systems